

THE CANADIAN GREAT LAKES BASIN

INTAKE OUTFALL ATLAS

(8 Volume Set)

Volume 7

AUGUST 1990



Ontario

Environment
Environnement

Jim Bradley, Minister/ministre

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CANADIAN GREAT LAKES BASIN

INTAKE - OUTFALL ATLAS

VOLUME 7

LAKE ONTARIO

by
Kleintfeldt Consultants Limited

AUGUST 1990

M. Griffiths (ed)

Water Resources Branch
ONTARIO MINISTRY OF THE ENVIRONMENT

1990, Her Majesty the Queen in Right of Ontario

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CANADIAN GREAT LAKES BASIN INTAKE/OUTFALL ATLAS

GUIDE TO USE

INTRODUCTION

The Canadian Great Lakes Basin Intake/Outfall Atlas will be used by various public organizations as well as private concerns for water quality assessment studies, pollution control plans, investigation of bacterial pollution problems at bathing beaches and in the formulation of long range management strategies.

The Canadian Great Lakes Basin, Intake Outfall Atlas is composed of eight separate volumes as listed below:

- Volume 1 - Lake Superior
- Volume 2 - St. Marys River
- Volume 3 - Lake Huron/Georgian Bay
- Volume 4 - St. Clair River/Lake St. Clair/
Detroit River
- Volume 5 - Lake Erie
- Volume 6 - Niagara River/Welland Canal/Welland River
- Volume 7 - Lake Ontario
- Volume 8 - St. Lawrence River

For the purposes of this project, questionnaires were sent to appropriate individuals at public and private intake and outfall facilities. Facilities may fall into any one of the industrial categories, or it can be a municipally or provincially operated Water Treatment Plant (WTP) or a Sewage Treatment Plant (STP). Municipalities were also contacted for information regarding various outfalls such as storm, combined, and sanitary sewers that discharge to the Great Lakes System or tributary stream. The bulk of the data were received by Kleinfeldt between December 1986 and June 1987.

A list of Ontario municipal, provincial and private industrial operations was developed using several sources including: IMIS and UMIS listings, from the Water and Wastewater Management Section, Regional Abatement and Utility Officers, Reports from the International Joint Commission, earlier versions of this Atlas, reports and discussions with various individuals. In order to be included in this Atlas identified operations must either discharge effluent (including cooling water and stormwater) to the Canadian Great Lakes or draw water from the the system. These operations must be located within 2 kilometres of the Great Lakes System shoreline. The Great Lakes System includes all Great Lakes within Canadian boundaries as well as the major Interconnecting Channels.

A report summarizing discharging operations and receiving water bodies has been prepared and submitted, under separate cover, to the Great Lakes Section.

USING THE ATLAS

I General Layout

The Atlas begins with Volume 1 representing Lake Superior and ends with Volume 8, representing the St. Lawrence River, thus following a general west to east flow. Mapping of the Great Lakes shoreline is accomplished by using continuous and overlapping hydrographic charts and topographic maps.

Each map contains a legend of symbols for quick reference, an orientation arrow indicating the north direction and a bar scale. When working with each map, check the scale as it may vary between maps.

II Legends

Legends provided on each map are self-explanatory. In the case of shore based effluent pipes, including sewer system outfalls, the arrowhead indicating outfall location is on the land side of shoreline. Similarly shore based intakes have their location indicators on the water side of the shoreline. Thus, location indicators also illustrate direction of flow through any given pipe. In some situations, because of pipe length and available map scale, offshore effluent and water intake pipes have been illustrated as shore based, however, consultation with the facing data page will give exact data on length of pipe from shore.

III Maps

Each map is numbered and is accompanied by a data page. Information on industrial, provincial or municipal intake or outfall structures within a map's borders is detailed on the data page. All intakes and outfalls, (excluding sewer system outfalls) have a numerical designation located as close to the actual structure as possible. These numerical designations begin at one (1) for each map, and relate to the "Structure Number" category on each data page. Although limited to descriptions of seven (7) structures per page there can be more than one data page relating to a simple map.

IV General

If a particular structure appears in the area of overlap between two maps the structure will be presented on one map only. However, where there is map duplication (i.e. between volumes) the structures will be mapped and data presented in both volumes.

Water and sewage treatment operations are listed by plant name. The Atlas user should refer to the location category in the data tables for identification of plant location. The abbreviations WPCP and STP describe sewage treatment operations and are assigned to an operation based on MOE designations.

V Lists of Operations:

In order to assist the user in locating the required information on a particular operation, we recommend that the user begin with our lists given below. Please note, these lists do not include municipal jurisdictions that provided sewer/drainage system information only.

Table 1: Listing of all operations that have major intake/outfall structures mapped and tabulated in the Atlas. Does not include municipal sewer/drainage outfalls.

Table 2: Listing of all operations within a given volume and a corresponding index.

Table 3: Listing of industrial operations not responding to the questionnaire (Information was subsequently supplied by the MOE).

VI Abbreviations:

Before using the Atlas it is recommended the user be familiar with the abbreviations presented in Table 4.

VII Explanation of Data Tables:

Table 5 provides a brief explanation of each information category to improve the clarity for the user.

Acknowledgments

The Canadian Great Lakes Basin Intake/Outfall Atlas was compiled by Kleinfeldt Consultants Limited, and with the assistance of the Great Lakes Section of the Ontario Ministry of the Environment's Water Resources Branch.

Kleinfeldt Consultants wishes to thank Mrs. Marta Griffiths of the MOE's Great Lakes Section for her time and patience exhibited throughout the course of this project.

We also acknowledge the efforts of Ministry of the Environment personnel, in the Great Lakes Section, as well as, Regional and District Offices who took the time and made the effort to review the data and maps contained in the Atlas, and provided comments, suggestions and additional information. Their efforts have allowed us to improve the document and hence the overall utility of the Atlas.

Kleinfeldt Consultants would also like to take this opportunity to thank the individuals in the ministry, local municipality and industry that provided information on 500 plus operations included in this Atlas. Without the cooperation and timely responses from the majority of contacts, this project would not have been a success.

Disclaimer

The information contained in this Atlas is as accurate as the information supplied in the completed and returned questionnaires. Due to the nature of the data collection, Kleinfeldt Consultants Limited is not responsible for erroneous information supplied by any one of the 400 plus operations.

Table 1

ALL OPERATIONS INCLUDED IN THE ATLAS

Lake Superior	St. Marys River	Lake Huron/Georgian Bay	St. Clair System	Lake Erie	Welland Canal/Niagara R.	Lake Ontario	St. Lawrence River
Abitibi Price Inc.	Algoma Steel Corp.	Blind River STP	Amherstburg WPCP	Amherstburg WPCP	Anger Ave. WPCP	Ajax WTP	BCL
Abitibi Price T.Bay Div.	Sault. Ste. Marie WPCP(1)	Brights Grove STP	Amherstburg WSS	Blenheim WSS	Atlas Specialty Steels	Amherstveiw WSS	Brockville WPCP
Canada Malting Co.	Sault. Ste. Marie WPCP(2)	Bruce A NGS	Belle River WPCP	Can. Haldiman Norfolk WSS	B.F. Goodrich Canada	Bakelite Thermosets	Brockville WTP
Domtar Packaging Ltd.	Sault. Ste. Marie WTP(1)	Bruce B NGS	Belle River WTP	Crystal Beach WPCP	Canadian Oxy-Chemicals	Baker Road WPCP	Cardinal WPCP
James River-Marathon Ltd.	Sault. Ste. Marie WTP(2)	Bruce Heavy Water Plant	Canadian Liquid Air	Crystal Beach WTP	Casco Company	Bath WPCP	Cardinal WTP
Kimberly Clark Can. Ltd	St. Marys Paper Inc.	Bruce Mines STP	Canadian Salt Co. (1)	Dunville WTP	Cyanamid N. Falls Plant	Bath WTP	Casco Company
Marathon STP	Union Carbide Canada Ltd.	Bruce Mines WTP	Canadian Salt Co. (2)	Elgin Area WSS	Cyanamid Welland Plant	Beamsville WTP	Charlottenburgh TWP. WTP
Nipigon STP		CIL /McDougall TWP	Chinnok Chemical Co.	Erieau Erie Beach WSS	Domtar Fine Papers	Belleville WPCP	Cornwall WPCP
Nipigon WTP		Collingwood WPCP	CIL Inc. Lampton Works	Harrow Colchester WSS	Electro Minerals(CAN) Inc.	Belleville WTP	Cornwall WTP
Northern Wood Preservers		Collingwood WTP	Corunna WPCP	H. J. Heinz Co.	Fleet Manufacturing Co.	Biggar Lagoon	Courtaulds Ltd.
Pancake Bay Prov. Park		Domtar Inc. Sifto Salt	Courtright WPCP	Inco Metals Inc.	Ford Motor Co.	Borg-Warner Chemicals	Domtar Fine Paper
Provincial Paper Division		Douglas Point NGS	Dow Chemical Canada Ltd.	Int. Min. & Chemicals	Fort Erie North Pump Stn.	Bowmanville WTP #1	Dupont Canada
Red Rock WPCP		Eldorado Resources Ltd.	DuPont Canada Inc.	Kent County WSS	Fort Erie South Pump Stn.	Bowmanville WTP #2	Edwardsburg WPCP
Red Rock WTP		Goderich WPCP	Edgewater Beach WPCP	Leamington WPCP	General Motors of Can.Ltd	Brighton STP	Gananoque Lagoon
Rosspoint WTP		Goderich WTP	Esso Petroleum Canada	Nanticoke TGS	Hayes Dana Dr. Train Div.	Burlington WTP	Gananoque WTP
Schreiber STP		Goodyear Canada Inc.	Ethyl Canada Inc.	Oastead Foods Ltd.	Holiday Farms	Canada Cement Lafarge Ltd	Iroquois STP
Schreiber WTP		Goodyear Canada Inc.	Fiberglass Canada Inc.	Port Burwell WPCP	Inco Metals Ltd.	Canada Malting Co. Ltd.	Iroquois WTP
Thunder Bay TGS		Gore Bay WPCP	Ford Motor Co. of Can.Ltd	Port Dover WPCP	Kimberly Clark Of Canada	Canadian Vegetable Oil	Kingston (City) WPCP
Thunder Bay WPCP		Gore Bay WTP	General Chemical	Port Dover WTP	Niagara Falls WTP	Canon Inc.	Kraft Foods Ltd.
Thunder Bay WTP		Grand Bend STP	General Motors of Canada	Port Rowan WPCP	Niagara-on-the-Lake STP	Celanese Canada Inc.	Long Sault WPCP
		Kilbear Provincial Park	Hiram Walker & Sons Ltd	Port Rowan WTP	Niagara-on-the-Lake WTP	CFB Mountainveiw WTP	Long Sault WTP
		Kincardine WPCP	J. C. Keath TGS	Port Stanely WTP	Norton Co.	CFB Trenton WPCP	Marimac Inc.
		Kincardine WTP	Lampton County WSS	Port Stanley STP	Ontario Paper Co.	Chrysler Canada Ltd.	Morrisburg WPCP
		Lake Huron WSS	Lampton TGS	Raliegh TWP STP	Ontario Power Co.	Clarkson WPCP	Morrisburg WTP
		Lions Head WTP	Little River WPCP	Rock Pt. Provincial Park	Port Weller WPCP	Cobourg STP #1	Nitrochem Inc.
		Little Current WTP	Mitchells Bay WPCP	Romey WPCP	Seaway WPCP	Cobourg STP #2	Osnabruck TWP WPCP
		McGregor Point Prov. Park	Mitchells Bay WTP	Rosehill WTP	Sir Adam Beck #1 HGS	Cobourg WTP	Osnabruck TWP WTP
		Meaford WPCP	Novacor Chemicals	Selkirk Provincial Pk.	Sir Adam Beck #2 HGS	Corbett Creek WPCP	Phillips Cables
		Meaford WTP	Petrosar Corunna	Stelco Inc. Erie Works	Stampford/Niagra STP	Darlington NGS	Prescott WTP
		Midland WPCP	Point Edward WPCP	Texaco Canada Inc.	Stelco Inc. Page Hersey	Deseronto WPCP	Richmond Die Casting Ltd.
		Mitsubishi Electronics	Polysar Ltd.	Turkey Pt. Provincial Pk.	Stelco Inc. Welland Tube	Deseronto WTP	River St. Pumping St
		Owen Sound WPCP	Port Lampton WPCP	Union Gas Ltd.	Stevensville Lagoon	Dofasco Inc.	Rohm & Hass Canada Inc.
		Owen Sound WTP	Sarnia WPCP	Union WSS	Union Carbide Canada Ltd.	Domtar Packaging	
		Parry Sound WTP	Shell Canada Ltd.	West Lorne WTP	Welland WPCP	Domtar Wood Preserving	
		Penetanguishene WPCP	Sombra WPCP	Wheatly WTP	Welland WSS	Duffins Creek WPCP	
		Penetang. Hospital STP	Stoney Point WPCP			DuPont Canada Ltd.	
		Petrolia WTP	Sunoco Inc.			Easterly Filtration Plant	
		Port Elgin WTP	The Segrain Co. Ltd.			Eldorado Resource Ltd.(1)	
		Port McNicoll STP	Tilbury North WSS			Eldorado Resource Ltd.(2)	
		Port McNicoll WTP	Tilbury WTP			Eldorado Resource Ltd.(3)	
		Rio Algom Ltd.	Wallaceburg WPCP			Elizabeth Gardens PS	
		Southampton WPCP	Wickes Bumper Co. Ltd.			E.D. Smith Limited	
		Southampton WTP	Windsor PUC WTP			Ford Motor Co. of Can.Ltd	
		Standard Aggregates Inc.	Windsor Tecumseh WTP			General Motors of Canada	
		Thessalon Pump House	Windsor WPCP			Goodyear Canada	
		Thessalon STP				Graham Creek WPCP	
		Thornbury WPCP				Grimsby WTP	
		Thornbury WTP				Hamilton Wentworth WPCP	

ALL OPERATIONS INCLUDED IN THE ATLAS

[illegible]

Table 1

ALL OPERATIONS INCLUDED IN THE ATLAS

Lake Superior	St. Marys River	Lake Huron/Georgian Bay	St. Clair System	Lake Erie	Welland Canal/Niagara R.	Lake Ontario	St. Lawrence River
						South East WPCP	
						South West WPCP	
						Stelco Inc Parkdale Works	
						Stelco Inc.	
						St. Lawrence Cement	
						St. Lawrence Starch Co.	
						St. Marys Cement Co.	
						Texaco Canada Inc. (1)	
						Texaco Canada Inc. (2)	
						Trenton WPCP	
						Trenton WTP	
						TWP of Etobicoke STP	
						Union Carbide Can. Ltd.	
						Victory Soya Mills	
						Vineland WTP	
						Waupoos Canning Co. Ltd.	
						Wellington Mushroom Farm	
						Wellington WPCP	
						Whitby WTP	

Table 2

OPERATIONS INCLUDED IN VOLUME 7
LAKE ONTARIO

Operation	Map Number

Ajax WTP	31
Amherstveiw WSS	86
Bakelite Thermosets	63
Baker Road WPCP	7
Bath WPCP	85
Bath WTP	85
Beamsville WTP	6
Belleville WPCP	63
Belleville WPCP	63
Belleville WTP	63
Biggar Lagoon	7
Borg-Warner Chemicals	42
Bowmanville WTP #1	35
Bowmanville WTP #2	35
Brighton STP	46
Burlington WTP	13
Canada Cement Lafarge Ltd	85
Canada Malting Co. Ltd.	21
Canadian Vegetable Oil	11
Canron Inc.	22
Celanese Canada Inc.	86
CFB Mountainveiw WTP	66
CFB Trenton WPCP	60
Chrysler Canada Ltd.	18
Clarkson WPCP	15
Cobourg WTP	42
Cobourg #1 STP	42
Cobourg #2 STP	42
Corbett Creek WPCP	32
Darlington NGS	34
Deseronto WPCP	71
Deseronto WTP	71
Dofasco Inc.	10
Domtar Packaging	60
Domtar Wood Preserving	60
Duffins Creek WPCP	31
DuPont Canada Ltd.	89
Easterly Filtration Plant	29
Eldorado Resource Ltd.	40
Eldorado Resource Ltd.	40A
Elizabeth Gardens PS	13
E.D. Smith Limited	8
Ford Motor Co.	15
General Motors of Canada	33
Goodyear Canada	34
Graham Creek WPCP	35
Grimsby WTP	7

Hamilton Wentworth WPCP	10
Hamilton Wentworth WTP	10
Harmony Creek WPCP 1&2	33
Highland Creek STP	29
Humber STP	20
Island Filtration Plant	23
Kingston TWP WPCP	89
Kingston TWP WTP	89
Kingston WPCP	91
Kingston WTP	90
Lake Ontario Cement	69
Lakeview TGS	17
Lakeview WPCP	17
Lakeview WTP	17
LASCO	32
Leaver Brothers	24
Lennox TGS	84
Long Branch STP	18
Lorne Park WTP	16
Main STP	27
Manson Insulation	29 + 30
New Toronto WTP	18
Newcastle WTP	35
Niagara-on-the-Lake STP	2
Niagara-on-the-Lake WTP	1
Oakville WTP	14
Oshawa WTP	33
Petro Canada Products	13
Petro Canada Products	15
Pickering NGS	30
Picton STP	69
Picton WTP	69
Point Anne WTP	64
Port Dalhousie WPCP	4
Port Darlington WPCP	35
Port Hope WPCP	40
Port Hope WTP	40A
Port Weller WPCP	3
Prince Edward Heights WPCP	69
Pringle Creek WPCP 1&2	32
Redpath Sugar	22
River St. Pumping St	91
R. C. Harris WTP	28
R. L. Clark WTP	18
R. L. Hearn TGS	24
Sandhurst Shores WTP	84
Scarborough Pump St.	28
Shell Canada Ltd.	13
Skyway WPCP	12
South East WPCP	15
South West WPCP	14
Stelco Inc Parkdale Works	10
Stelco Inc.	10
Stelco Inc.	11
St. Lawrence Cement	15
St. Lawrence Starch Co.	16
St. Marys Cement Co.	34

Texaco Canada Inc.	16
Texaco Canada Inc.	24
Trenton WPCP	60
Trenton WTP	60
Twp of Etobicoke STP	18
Union Carbide Can. Ltd.	14
Victory Soya Mills	22
Vineland WTP	5
Waupoos Canning Co. Ltd.	75
Wellington Mushroom Farm	53
Wellington WPCP	53
Whitby WTP	32

Table 3

INDUSTRY NOT RESPONDING TO QUESTIONNAIRE

INFORMATION OBTAINED FROM MOE

Name of Operation	Location	Comments
Arrowhead Metals	Toronto	No applicable intake or outfall structures
BCL	Cornwall	From Southeast Regional Office
Courtaulds	Cornwall	From Southeast Regional Office
Domtar Construction Materials	Thorold	From Welland District Office
Domtar Wood Preservers	Trenton	From Southeast Regional Office
Du Pont	Corunna	From Southwest Regional Office
Du Pont	Kingston	From Southeast Regional Office
Du Pont	Whitby	No applicable intake or outfall structures
Du Pont	Maitland	From Southeast Regional Office
Esco Ltd.	Whitby	No applicable intake or outfall structures
Fittings Ltd.	Whitby	No applicable intake or outfall structures
Ford Motor Co. of Canada	Essex Engine Plant	No applicable intake or outfall structures
Ford Motor Co. of Canada	Windsor Engine Plant	From Southwest Regional Office
General Chemicals	Sombra	From Southwest Regional Office
Holiday Farms	Niagara Falls	From Welland District Office
Kraft Ltd.	Williamstown	No applicable intake or outfall structures
Kraft Ltd.	Wolfe Island	No applicable intake or outfall structures
Kraft Ltd.	Ingleside	From Southeast Regional Office

Table 4

LIST OF ABBREVIATIONS

CEN	Central	
CFB	Canadian Forces Base	
CSO	Combined Sewer Overflow	
DND	Department of National Defence	
EO	Emergency Overflow	
IND	Industrial Operation	
MGS	Ministry of Government Services	
MNR	Ministry of Natural Resources	
MOE	Ministry of the Environment	
MUN	Municipal Operation	
NA	Not Available	
NGS	Nuclear Generating Station	
P Removal	Phosphorus Removal	
PP	Provincial Park	
PS	Pumping Station	
PUC	Public Utilities Commission	
RM	Regional Municipality	
S	Sanitary Sewer Overflow	
SS	Storm Sewer	
STP	Sewage Treatment Plant (same as WPCP)	
TGS	Thermal Generating Station	
TWP	Township	
UV	Ultra-Violet	
WPCP	Water Pollution Control Plant (same as STP)	
WSS	Water Supply System	
WTP	Water Treatment Plants	

TABLE 5

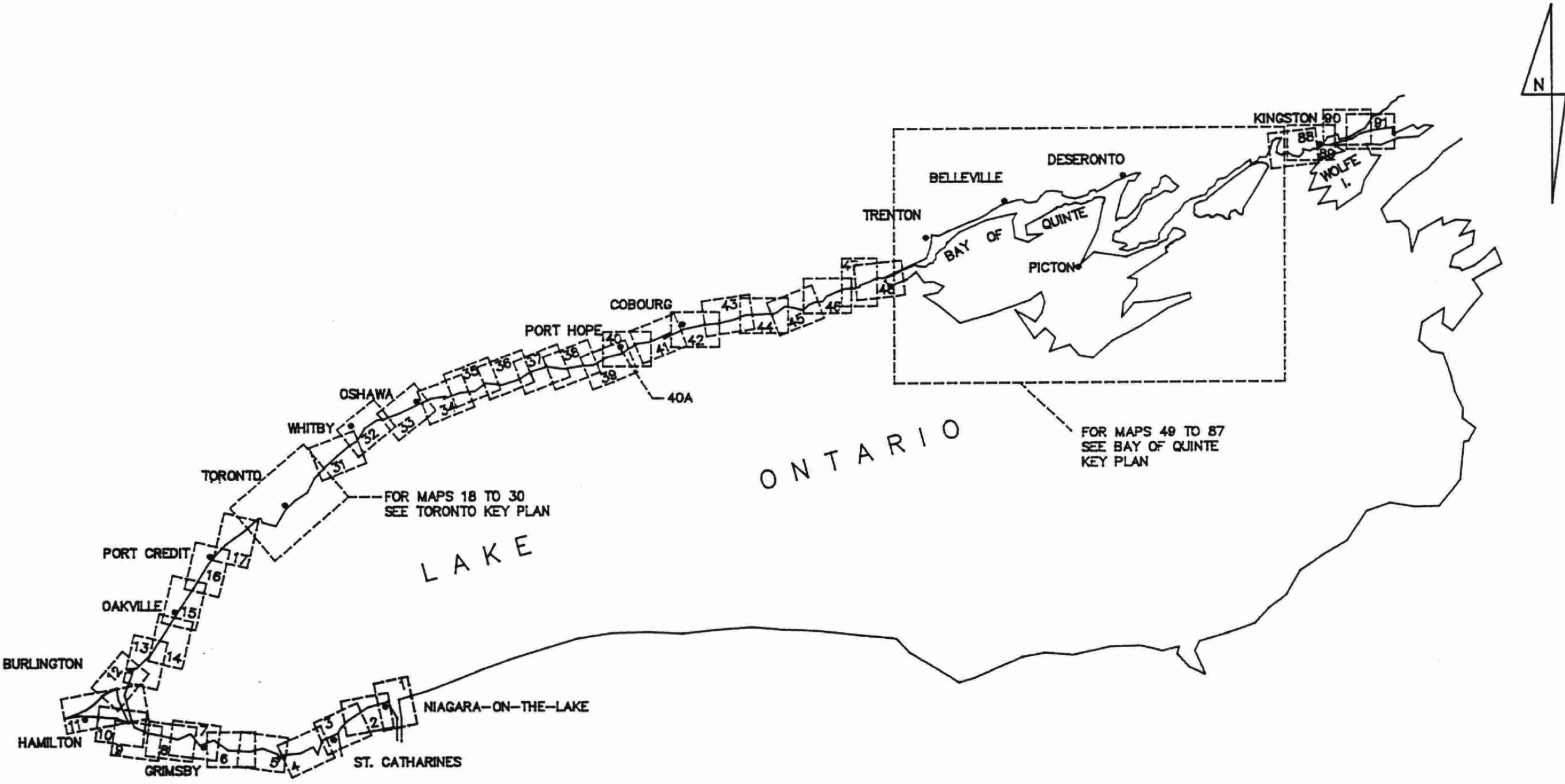
EXPLANATION OF DATA TABLES

Name of Operation:	Name of municipality or industry
Intake/Outfall:	Indication of Use of pipe
UMIS/IMIS No.:	Number in the Ministry's Utility Monitoring Information System and Industrial Monitoring Information System from which other data can be obtained.
Structure No.:	Indicates structures on the accompanying map.
Map No.:	Indicates map on which the structure can be located.
Operating Authority:	Identifies who owns or has jurisdiction over the facility i.e. Industry, MOE, MNR, MUN, PUC, MGS, etc.
Location:	Identifies where the facility and accompanying structures are located (usually indicated by as City, Town or Township).
Supplier/Receiver:	Identifies the water body that wither supplies water to a facility via the intake, or receives effluent via the outfall.
Point of Discharge:	Applies to outfalls only. Indicates location of discharge i.e. shore (0-99 m from shoreline), offshore (>100m for shoreline), harbour, embayment, river mouth (0-2 km upstream from lake).
Terminal Basin:	Lake or river basin, from which water is drawn or effluent discharged to
Activity:	General categorization of a particular facility (eg. Steel Production, Municipal Water Treatment, etc.)
Process Type:	Description of activity (eg. Major phases of Steel production, Physical and Chemical Treatment, Secondary Treatment, etc.)
Supply/Discharge Type:	Description of how water is drawn in, or effluent discharged (eg. Continuous, Batch Seasonal, etc.)

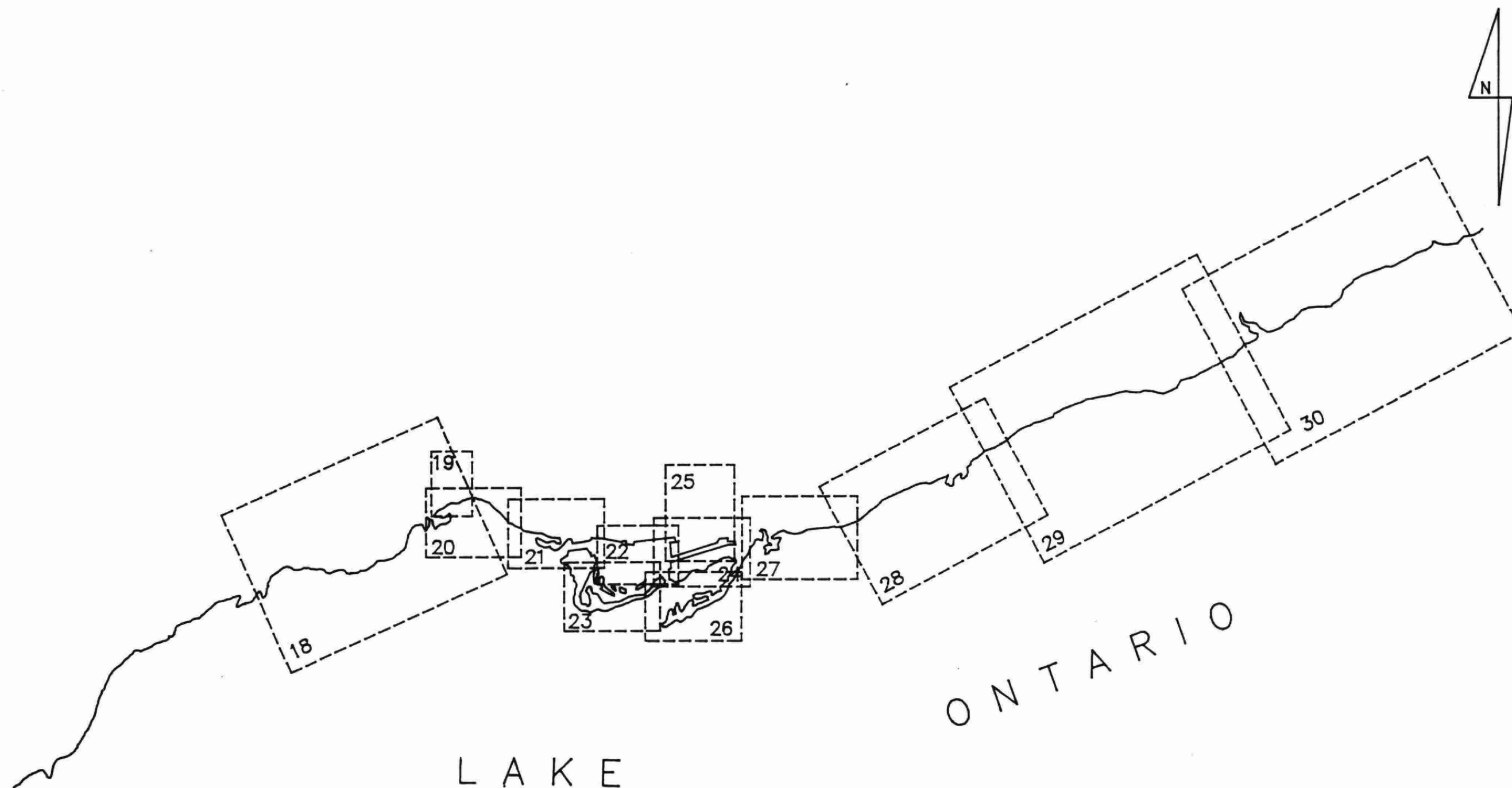
Treatment Type:	Description of how water and/or effluent is treated before use/before discharge. Indication of major steps in treatment, if any.
Comments:	Any other remarks relating to the operation, its intakes or outfalls, process or treatment activities, such as plant closures, future modifications, relationship with nearby operations, etc;
Design Flow:	Quantity (in 1,000 m ³ /day) of water can be drawn in via intake or discharged via outfall according to design specifications.
Mean Annual Flow:	Quantity (in 1,000 m ³ /day) on the average, of water can be drawn in via intake or discharged via outfall according to design specifications.
Pipe Length from Shore:	Length of intake/outfall pipe from shore, given in metres.
Pipe Diameter:	Given in centimeters. If pipe is rectangular or oval in shape, the largest dimension is given.
Water Depth at End of Pipe:	Depth of water, in metres, at the end of the pipe.
Water Depth above End of Pipe:	Depth of water, in metres, above the end of the pipe.
Diffuser:	Applies to outfall structures only. Indicates if an effluent diffusing structure is present on the outfall.
Number of Ports:	If diffuser is present on the outfall an indication is given to the number of ports in the diffusing structure.

KEY PLAN

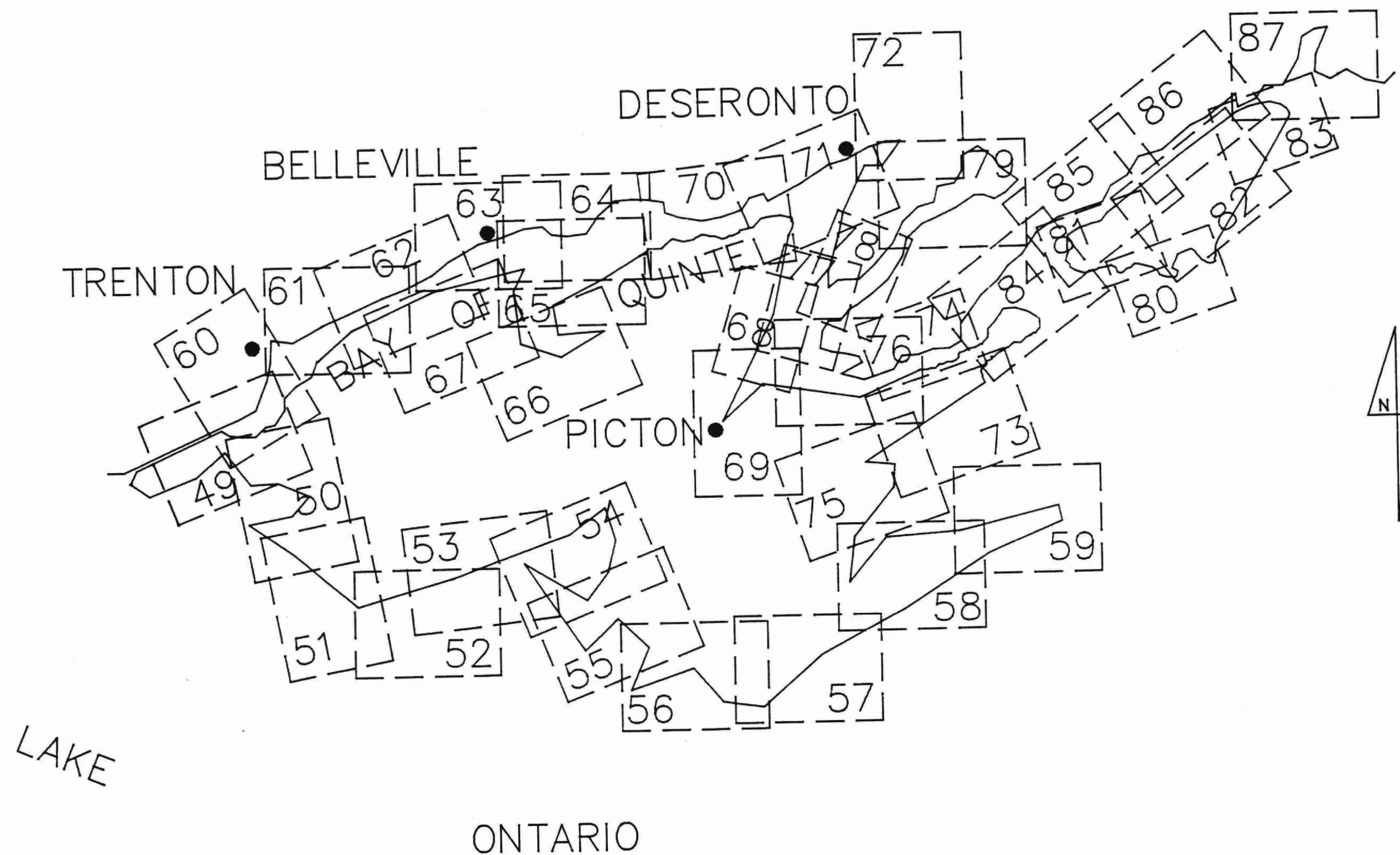
LAKE ONTARIO KEY PLAN



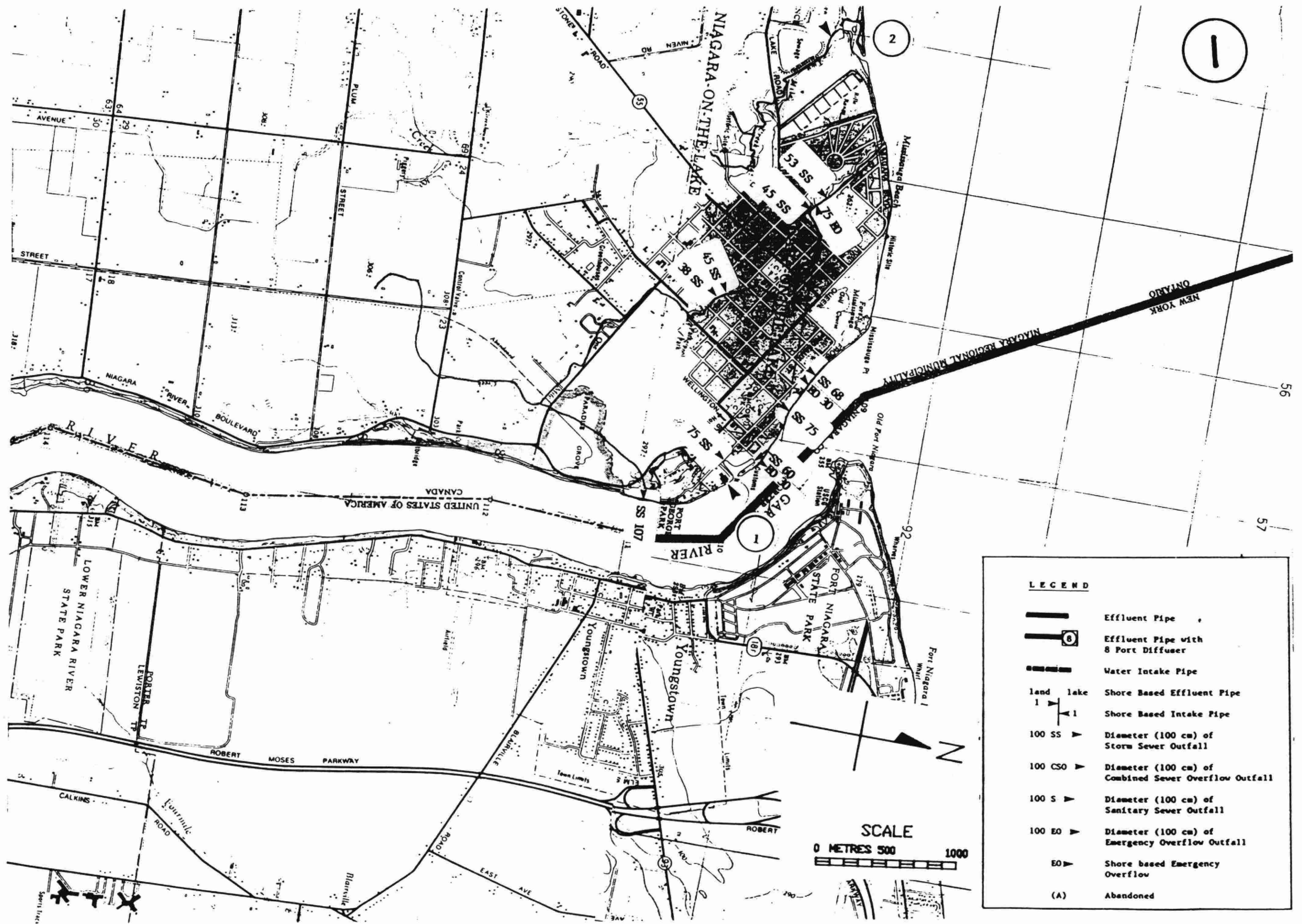
TORONTO
KEY PLAN
MAPS 18 TO 30



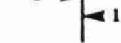
BAY OF QUINTE
KEY PLAN
MAPS 49 TO 87



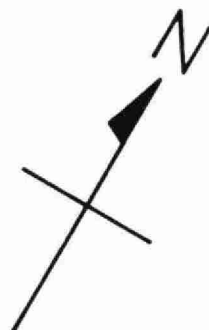
Name	Niagara-on-the-Lake WTP	Niagara-on-the-Lake STP					
Intake/Outfall	Intake	Outfall					
UMIS/IMIS No.	NA	120001238					
Structure No.	1	2					
Map Number	1	1					
Operating Authority	Niagara RM	Niagara RM					
Location	Niagara on the Lake	Niagara on the Lake					
Supplier/Receiver	Niagara River	2 Mile Creek					
Point of Discharge		River Mouth					
Terminal Basin	Lake Ontario	Lake Ontario					
Activity	Municipal Water Treatment	Municipal Sewage Treatment					
Process Type	NA	Secondary Treatment					
Supply/Discharge Type	NA	Continuous					
Treatment Type	NA	2 Settling Ponds 2 Mechanical Aeration					
Comments	Decommissioned in 1986 Two intake ports Water now from DeCew WSS						
Design Flow (1000m3/day)	NA	3.84					
Mean Annual Flow (1000m3/day)	NA	3.51					
Pipe length from shore (m)	28.00	0.00					
Pipe Diameter (cm)	25.00	45.00					
Water Depth at end of pipe (m)	9.50	0.00					
Water depth above end of pipe (m)	9.00	0.00					
Diffuser		NO					
Number of ports							



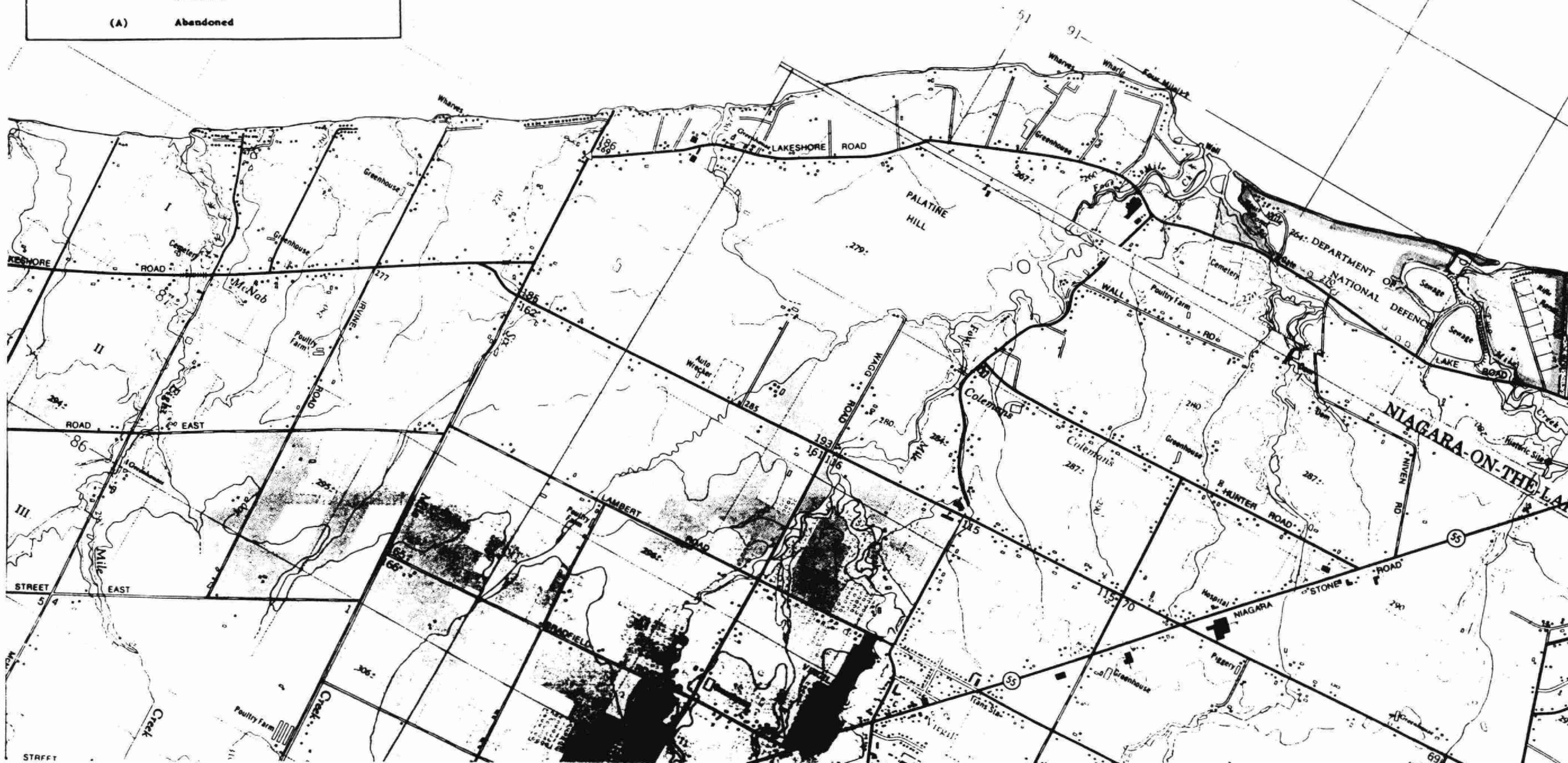
LEGEND

-  Effluent Pipe
-  Effluent Pipe with 8 Port Diffuser
-  Water Intake Pipe
- land lake
 Shore Based Effluent Pipe
-  Shore Based Intake Pipe
- 100 SS  Diameter (100 cm) of Storm Sewer Outfall
- 100 CSO  Diameter (100 cm) of Combined Sewer Overflow Outfall
- 100 S  Diameter (100 cm) of Sanitary Sewer Outfall
- 100 EO  Diameter (100 cm) of Emergency Overflow Outfall
- EO  Shore based Emergency Overflow
- (A) Abandoned

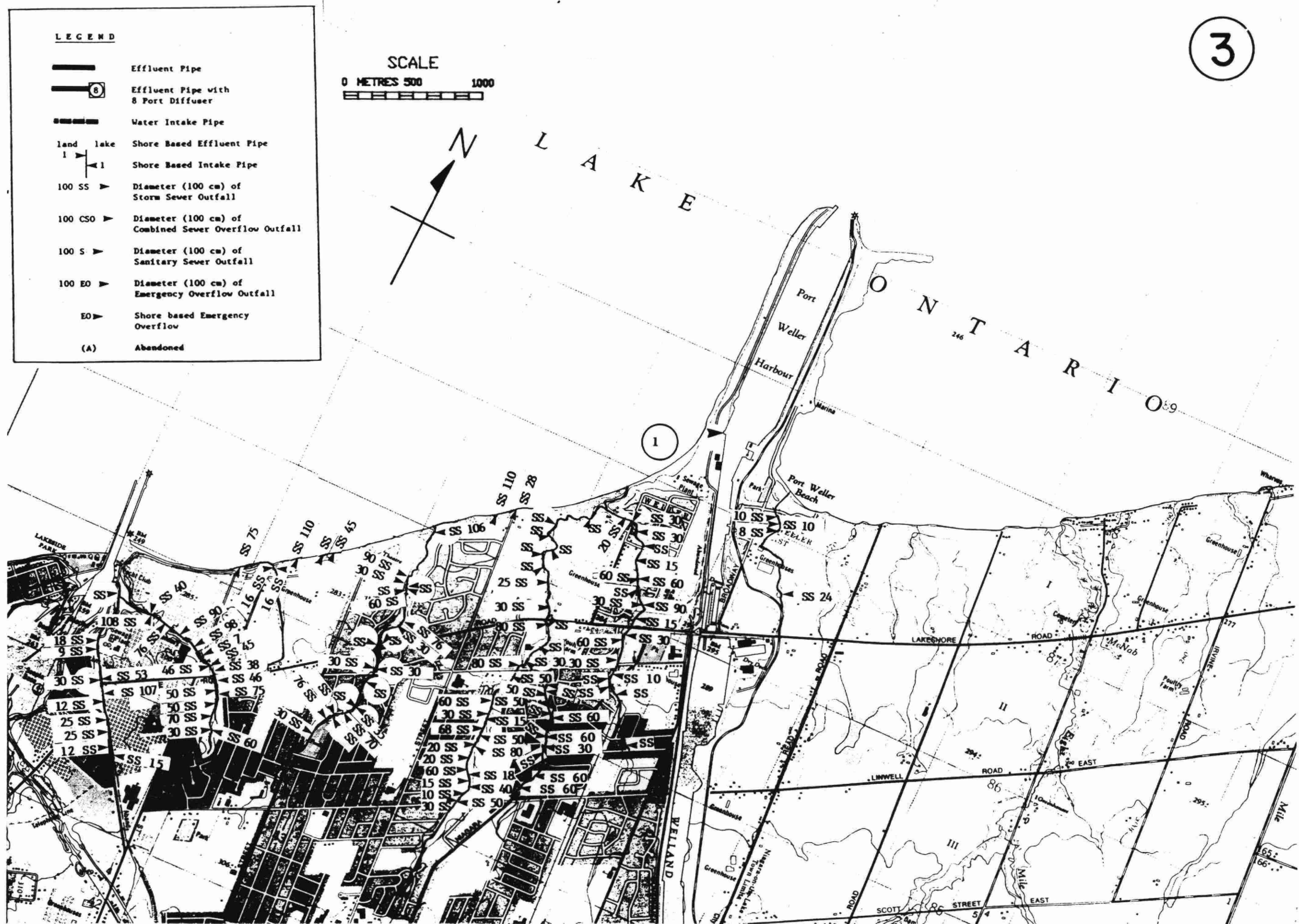
SCALE
0 METRES 500 1000



2

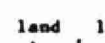
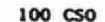


Name	Port Weller WPCP						
Intake/Outfall	Outfall						
DMIS/IMIS No.	120001318						
Structure No.	1						
Map Number	3						
Operating Authority	Niagara RM						
Location	St. Catharines						
Supplier/Receiver	Welland Canal/L. Ontario						
Point of Discharge	Shore						
Terminal Basin	Lake Ontario						
Activity	Municipal Sewage Treatment						
Process Type	Secondary Treatment						
Supply/Discharge Type	Continuous						
Treatment Type	Biological Treatment Mechanical Aeration P Removal-Continuous						
Comments							
Design Flow (1000m3/day)	54.59						
Mean Annual Flow (1000m3/day)	41.87						
Pipe length from shore (m)	0.00						
Pipe Diameter (cm)	105.00						
Water Depth at end of pipe (m)	9.00						
Water depth above end of pipe (m)	0.00						
Diffuser	NO						
Number of ports							



Name	Port Dalhousie WPCP					
Intake/Outfall	Outfall					
UNIS/IMIS No.	120001327					
Structure No.	1					
Map Number	4					
Operating Authority	Niagara RM					
Location	St. Catharines					
Supplier/Receiver	Twelve Mile Creek					
Point of Discharge	River Mouth					
Terminal Basin	Lake Ontario					
Activity	Municipal Sewage Treatment					
Process Type	Secondary Treatment					
Supply/Discharge Type	Continuous					
Treatment Type	Activated Sludge Mechanical Aeration P Removal-Continuous					
Comments						
Design Flow (1000m3/day)	61.41					
Mean Annual Flow (1000m3/day)	41.05					
Pipe length from shore (m)	45.00					
Pipe Diameter (cm)	150.00					
Water Depth at end of pipe (m)	6.00					
Water depth above end of pipe (m)	6.00					
Diffuser	NO					
Number of ports						

LEGEND

-  Effluent Pipe
-  Effluent Pipe with Port Diffuser
-  Water Intake Pipe
-  Shore Based Effluent Pipe
-  Shore Based Intake Pipe
-  100 SS > Diameter (100 cm) of Storm Sewer Outfall
-  100 CSO > Diameter (100 cm) of Combined Sewer Overflow Outfall
-  100 S > Diameter (100 cm) of Sanitary Sewer Outfall
-  100 EO > Diameter (100 cm) of Emergency Overflow Outfall
-  EO > Shore based Emergency Overflow
-  (A) Abandoned

SCALE
0 METRES 500 1000



4



Name	Vineland WTP						
Intake/Outfall	Intake						
UNIS/INIS No.	NA						
Structure No.	1						
Map Number	5						
Operating Authority	Niagara RM						
Location	Vineland						
Supplier/Receiver	Lake Ontario						
Point of Discharge							
Terminal Basin	Lake Ontario						
Activity	Municipal Water Treatment						
Process Type	NA						
Supply/Discharge Type	NA						
Treatment Type	NA						
Comments	Decommissioned in 1981 Area now supplied with raw water by the DeCew WSS						
Design Flow (1000m3/day)	NA						
Mean Annual Flow (1000m3/day)	NA						
Pipe length from shore (m)	214.00						
Pipe Diameter (cm)	30.00						
Water Depth at end of pipe (m)	7.00						
Water depth above end of pipe (m)	6.50						
Diffuser							
Number of ports							

LEGEND

-  Effluent Pipe
-  Effluent Pipe with 8 Port Diffuser
-  Water Intake Pipe
- land lake  Shore Based Effluent Pipe
-  Shore Based Intake Pipe
- 100 SS  Diameter (100 cm) of Storm Sewer Outfall
- 100 CSO  Diameter (100 cm) of Combined Sewer Overflow Outfall
- 100 S  Diameter (100 cm) of Sanitary Sewer Outfall
- 100 EO  Diameter (100 cm) of Emergency Overflow Outfall
- EO  Shore based Emergency Overflow
- (A) Abandoned

SCALE
0 METRES 500 1000



Name	Beamsville WTP					
Intake/Outfall	Intake					
UMIS/INIS No.	220001986					
Structure No.	1					
Map Number	6					
Operating Authority	Niagara RM					
Location	Beamsville					
Supplier/Receiver	Lake Ontario					
Point of Discharge						
Terminal Basin	Lake Ontario					
Activity	Municipal Water Treatment					
Process Type	Physical and Chemical Treatment					
Supply/Discharge Type	Continuous					
Treatment Type	Screening, Filtration Coagulation, Flocculation Chlorination					
Comments						
Design Flow (1000m3/day)	4.09					
Mean Annual Flow (1000m3/day)	2.14					
Pipe length from shore (m)	210.00					
Pipe Diameter (cm)	30.00					
Water Depth at end of pipe (m)	7.50					
Water depth above end of pipe (m)	6.50					
Diffuser						
Number of ports						

LEGEND

-  Effluent Pipe
-  Effluent Pipe with 8 Port Diffuser
-  Water Intake Pipe
-  land lake
Shore Based Effluent Pipe
-  Shore Based Intake Pipe
-  100 SS > Diameter (100 cm) of Storm Sewer Outfall
-  100 CSO > Diameter (100 cm) of Combined Sewer Overflow Outfall
-  100 S > Diameter (100 cm) of Sanitary Sewer Outfall
-  100 EO > Diameter (100 cm) of Emergency Overflow Outfall
-  EO > Shore based Emergency Overflow
-  (A) Abandoned

SCALE

0 METRES 500 1000

N

L A K E O N T

87

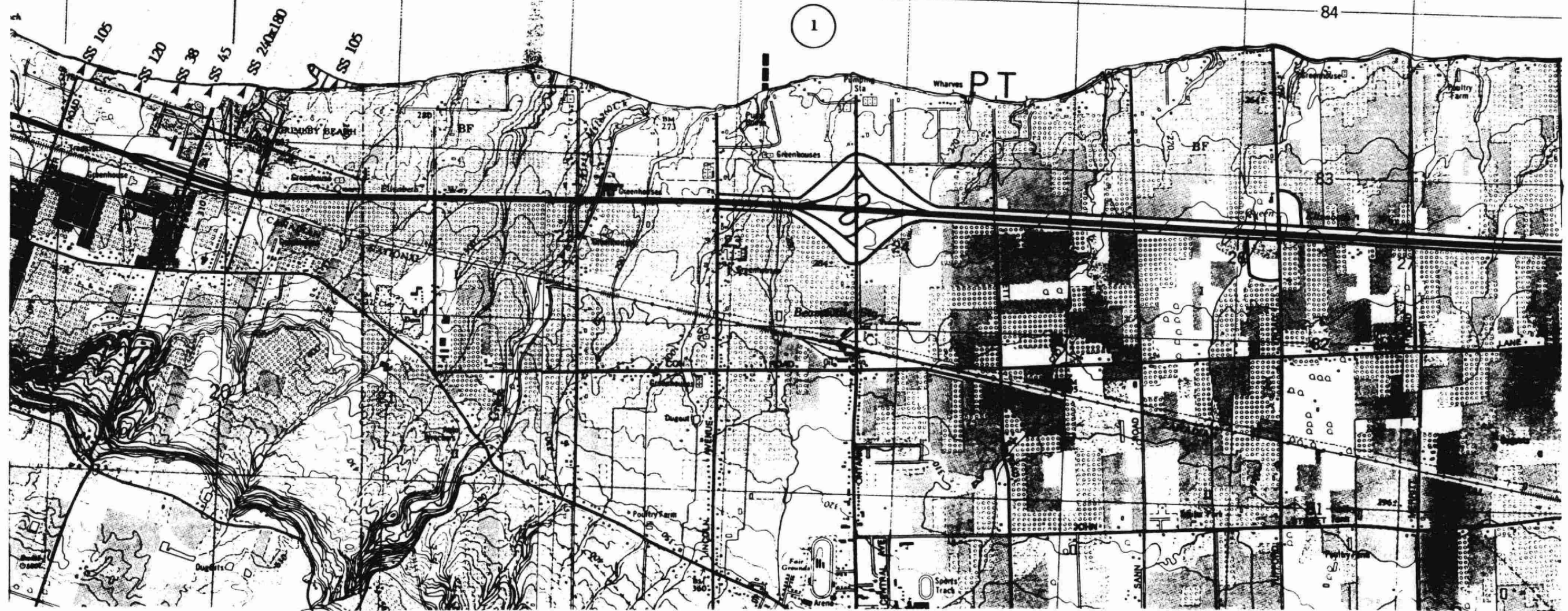
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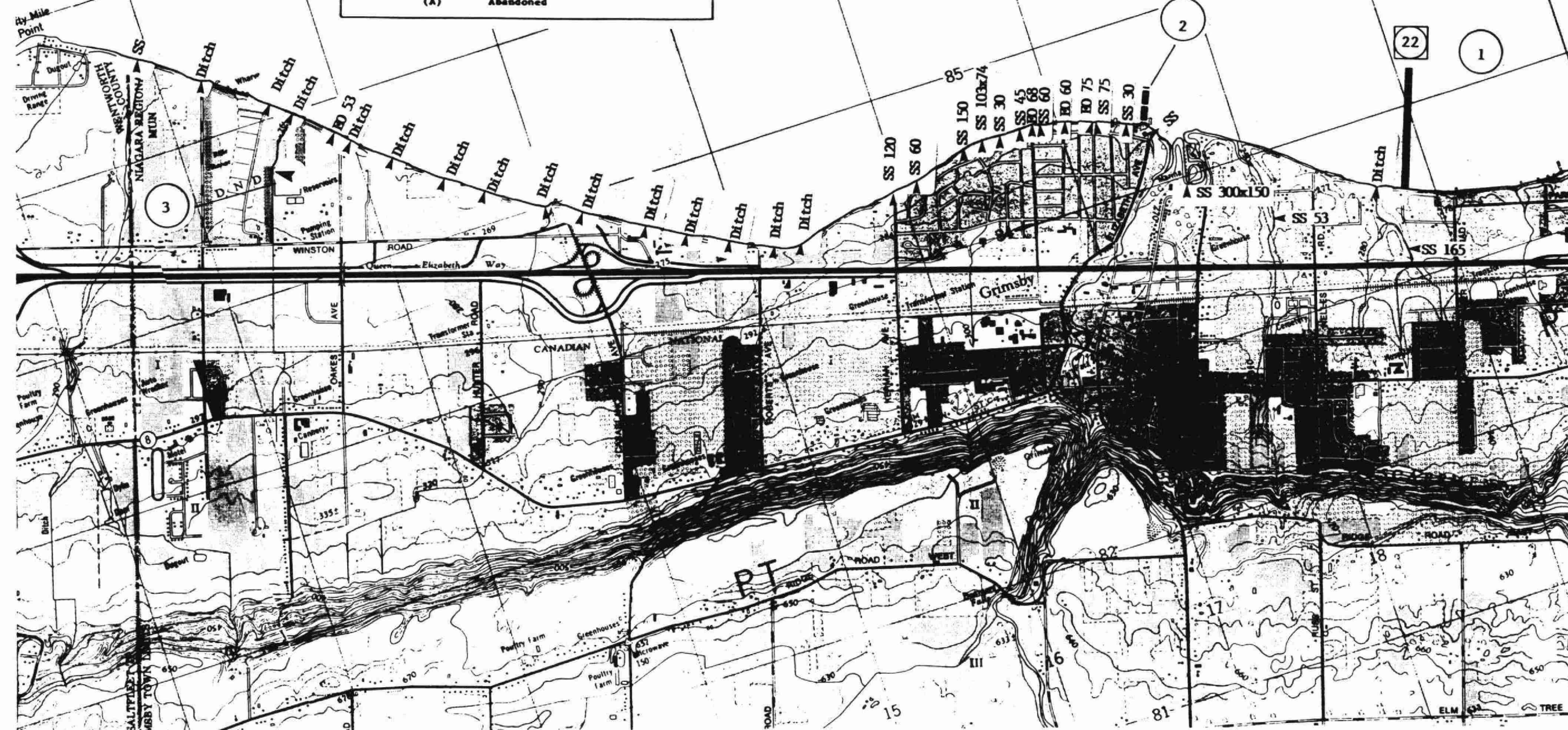
Name	Baker Road WPCP	Grimsby WTP	Biggar Lagoon				
Intake/Outfall	Outfall	Intake	Outfall				
UNIS/INIS No.	NA	220001995	120001256				
Structure No.	1	2	3				
Map Number	7	7	7				
Operating Authority	Niagara RM	Niagara RM	Niagara RM				
Location	Grimsby	Grimsby	Grimsby				
Supplier/Receiver	Lake Ontario	Lake Ontario	Forty Three Mile Creek				
Point of Discharge	Offshore		River Mouth				
Terminal Basin	Lake Ontario	Lake Ontario	Lake Ontario				
Activity	Municipal Sewage Treatment	Municipal Water Treatment	Municipal Sewage Treatment				
Process Type	Secondary Treatment	Physical and Chemical Treatment	Primary Treatment				
Supply/Discharge Type	Continuous	Continuous	Continuous				
Treatment Type	Biological, Mechanical Aeration P Removal-Continuous	Screening, Filtration Coagulation, Flocculation Chlorination	Mechanical Aeration and Settling lagoons				
Comments							
Design Flow (1000m3/day)	18.20	19.30	1.73				
Mean Annual Flow (1000m3/day)	12.20	6.90	1.36				
Pipe length from shore (m)	701.00	225.00	0.00				
Pipe Diameter (cm)	120.00	45.00	30.00				
Water Depth at end of pipe (m)	10.00	6.00	0.00				
Water depth above end of pipe (m)	9.00	5.00	0.00				
Diffuser	YES		NO				
Number of ports	22						

SCALE
0 METRES 500 1000

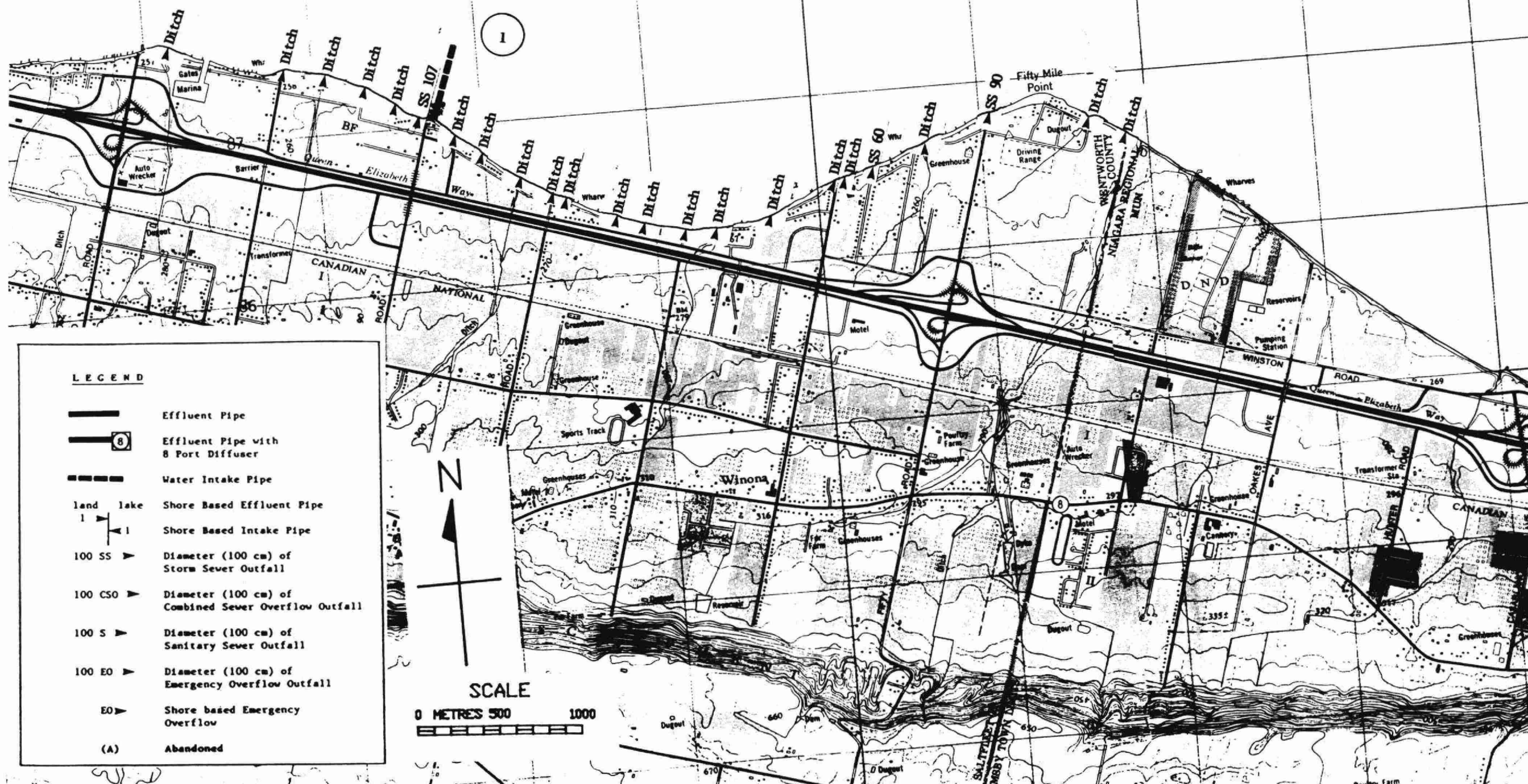
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LEGEND

-  Effluent Pipe
-  Effluent Pipe with 8 Port Diffuser
-  Water Intake Pipe
- land lake  Shore Based Effluent Pipe
-  Shore Based Intake Pipe
- 100 SS  Diameter (100 cm) of Storm Sewer Outfall
- 100 CSO  Diameter (100 cm) of Combined Sewer Overflow Outfall
- 100 S  Diameter (100 cm) of Sanitary Sewer Outfall
- 100 EO  Diameter (100 cm) of Emergency Overflow Outfall
- EO  Shore based Emergency Overflow
- (A)  Abandoned



Name	E.D. Smith Limited						
Intake/Outfall	Intake						
OHIS/INIS No.	NA						
Structure No.	1						
Map Number	8						
Operating Authority	IND						
Location	Winona						
Supplier/Receiver	Lake Ontario						
Point of Discharge							
Terminal Basin	Lake Ontario						
Activity	Food Processing						
Process Type	NA						
Supply/Discharge Type	Continuous						
Treatment Type	NA						
Comments	Water used for product cooling and washup						
Design Flow (1000m3/day)	6.48						
Mean Annual Flow (1000m3/day)	3.24						
Pipe length from shore (m)	486.00						
Pipe Diameter (cm)	30.00						
Water Depth at end of pipe (m)	7.30						
Water depth above end of pipe (m)	3.00						
Diffuser							
Number of ports							

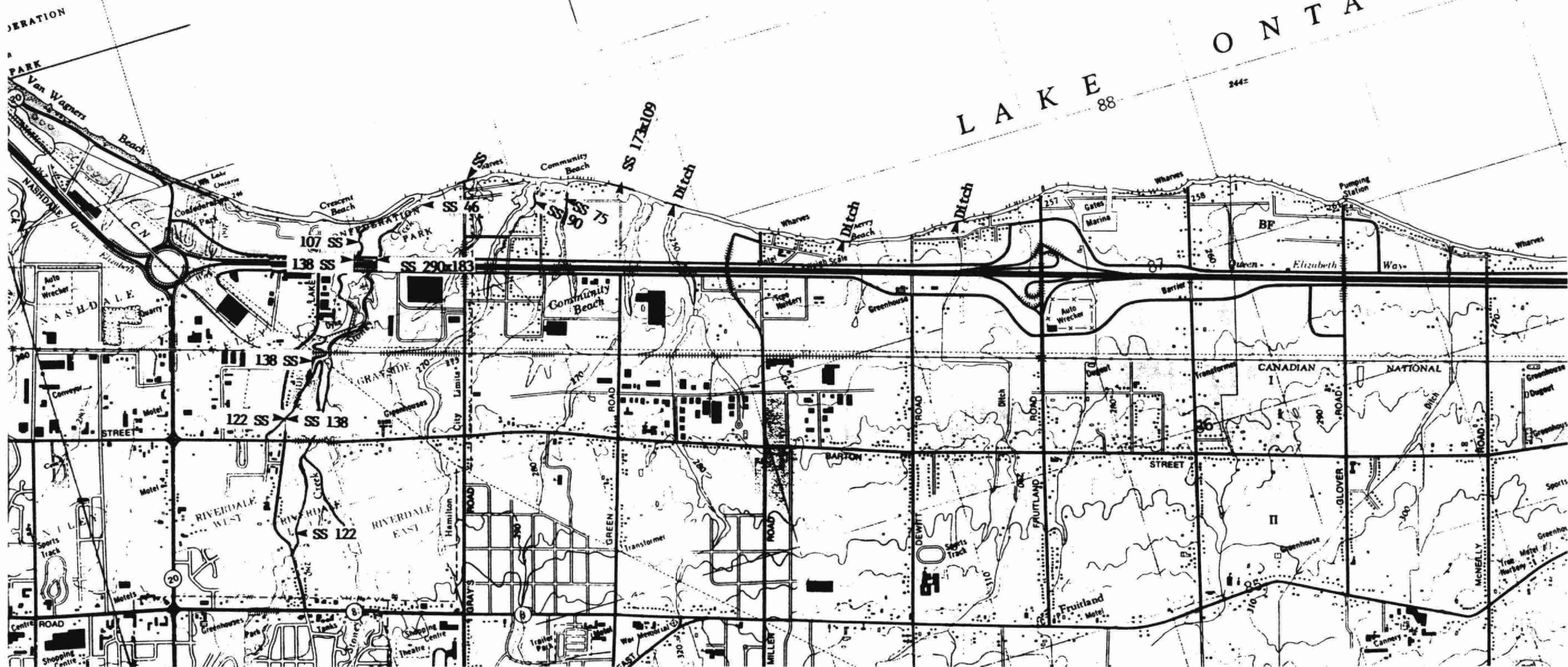
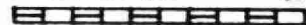


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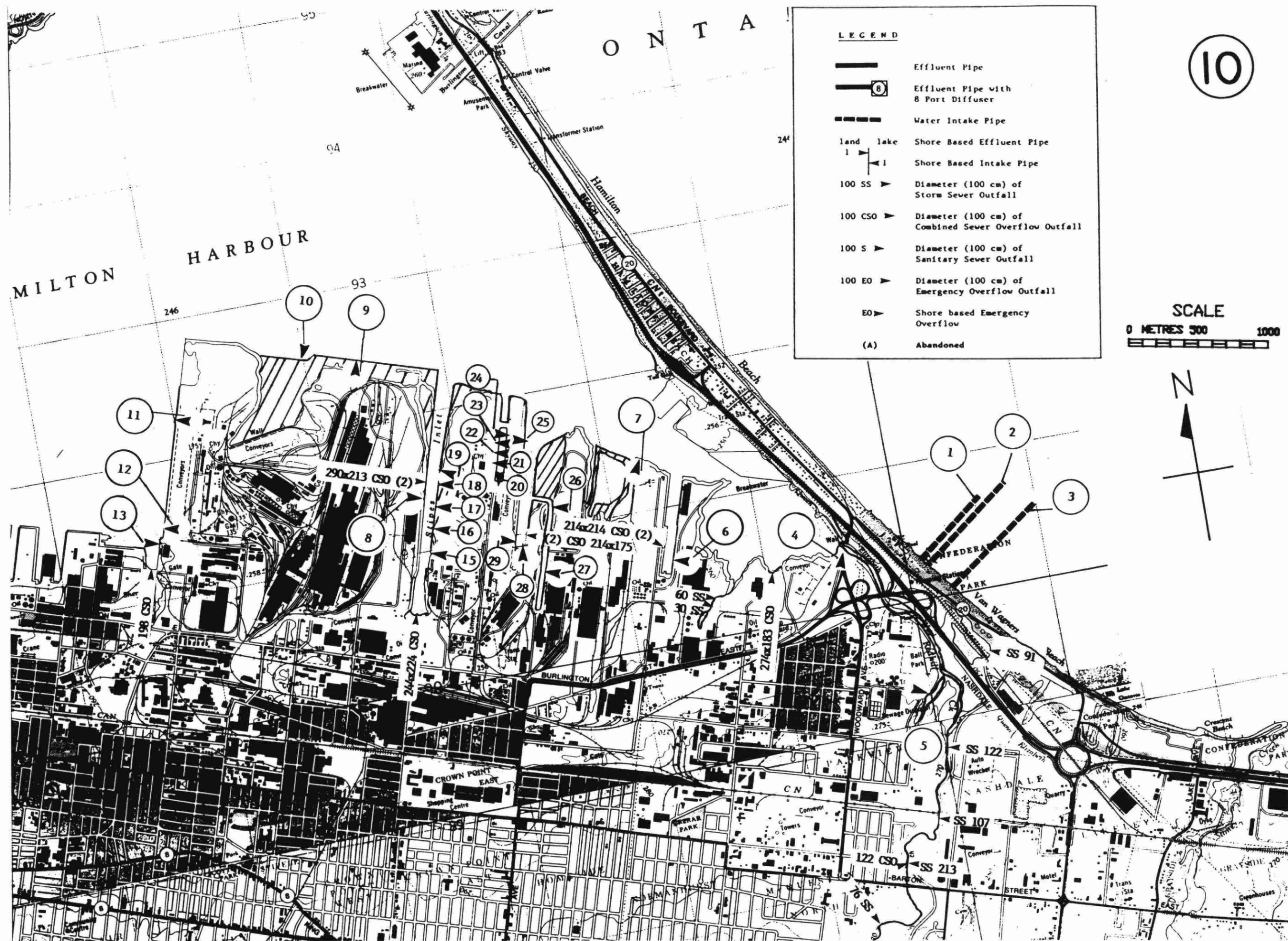
- | | |
|--|--|
|  | Effluent Pipe |
|  | Effluent Pipe with
8 Port Diffuser |
|  | Water Intake Pipe |
| land lake
1  | Shore Based Effluent Pipe |
|  1 | Shore Based Intake Pipe |
| 100 SS  | Diameter (100 cm) of
Storm Sever Outfall |
| 100 CSO  | Diameter (100 cm) of
Combined Sewer Overflow |
| 100 S  | Diameter (100 cm) of
Sanitary Sewer Outfall |
| 100 EO  | Diameter (100 cm) of
Emergency Overflow Outfall |
| EO  | Shore based Emergency
Overflow |
| (A) | Abandoned |

SCALE

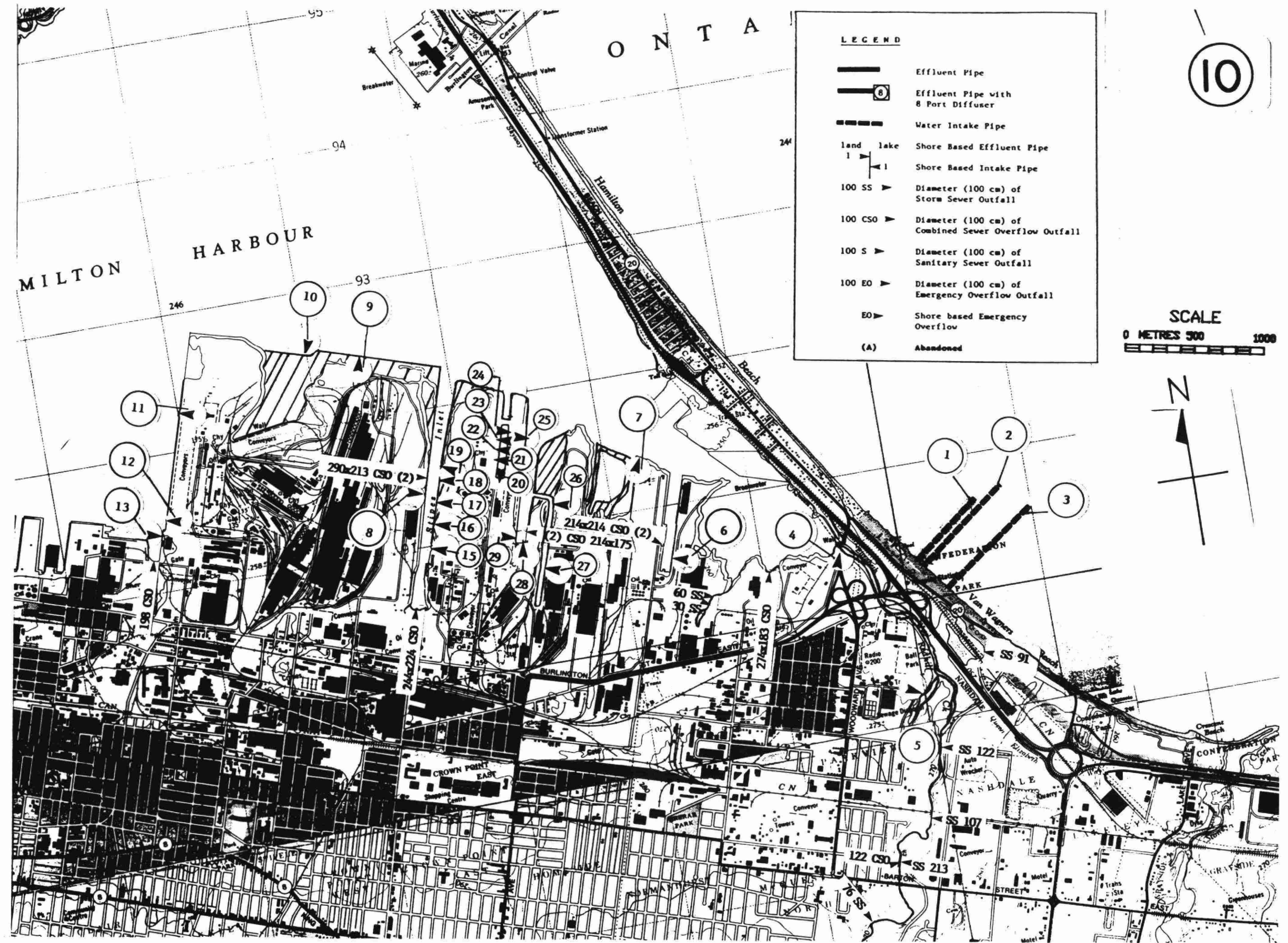
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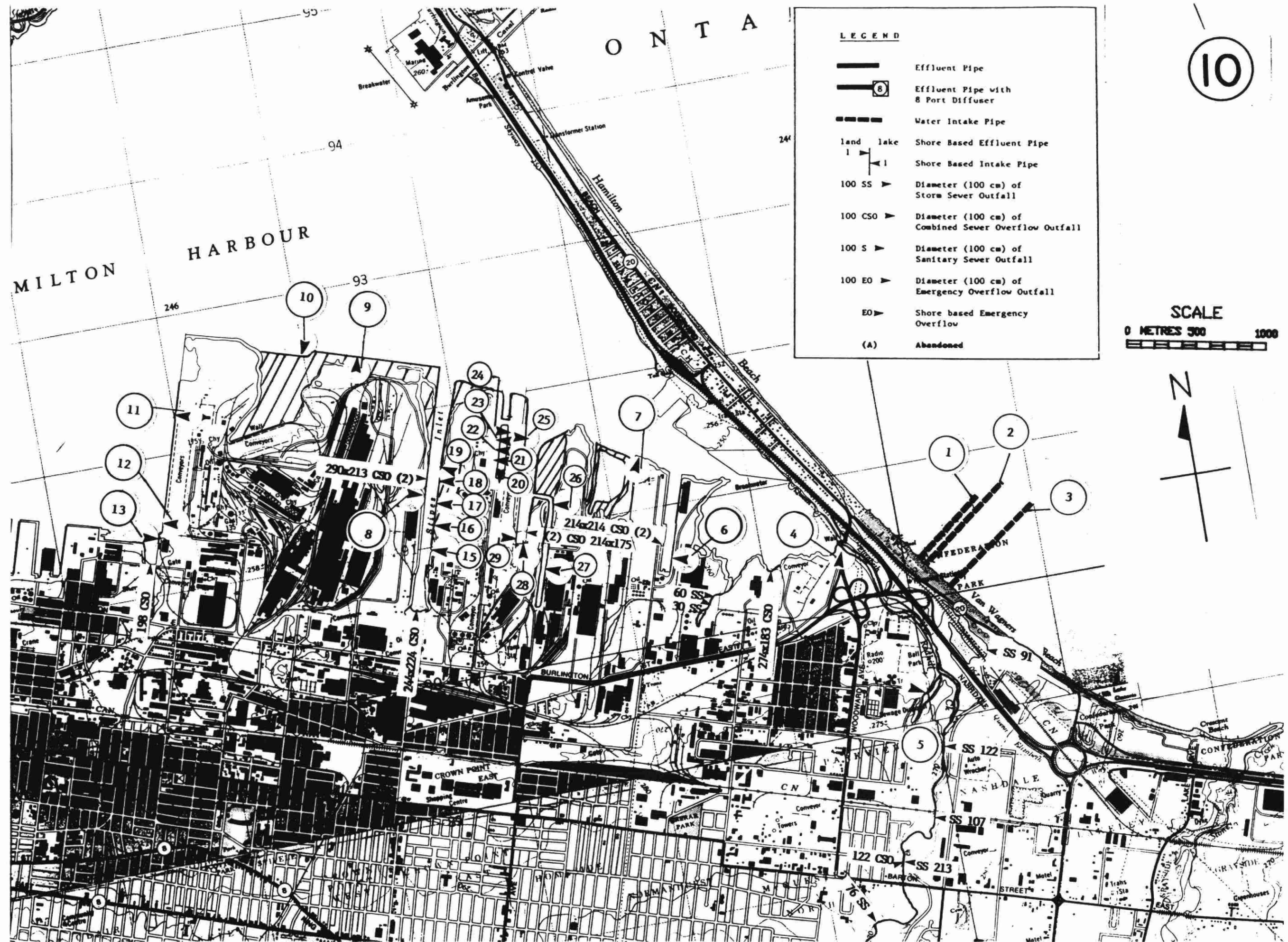
Name	Hamilton Wentworth WTP	Hamilton Wentworth WTP	Hamilton Wentworth WTP	Hamilton Wentworth WPCP	Hamilton Wentworth WPCP	Stelco Inc Parkdale Works	Stelco Inc Parkdale Works
Intake/Outfall	Intake #1	Intake #2	Intake #3	Outfall #1	Outfall #2	Outfall	Outfall
UNIS/INIS No.	220003118	220003118	220003118	120001504	120001504	NA	0000950006
Structure No.	1	2	3	4	5	6	7
Map Number	10	10	10	10	10	10	10
Operating Authority	MUN	MUN	MUN	MUN	MUN	IND	IND
Location	Hamilton	Hamilton	Hamilton	Hamilton	Hamilton	Hamilton	Hamilton
Supplier/Receiver	Lake Ontario	Lake Ontario	Lake Ontario	Red Hill Creek	Red Hill Creek	Hamilton Harbour	Hamilton Harbour
Point of Discharge				River Mouth	River Mouth		Harbour
Terminal Basin	Lake Ontario	Lake Ontario	Lake Ontario	Lake Ontario	Lake Ontario	Lake Ontario	Lake Ontario
Activity	Municipal Water Treatment	Municipal Water Treatment	Municipal Water Treatment	Municipal Sewage Treatment	Municipal Sewage Treatment	Ferrous Wire Manufacturing	Integrated Steel Production Facility
Process Type	Physical and Chemical Treatment	Physical and Chemical Treatment	Physical and Chemical Treatment	Secondary Treatment	Secondary Treatment	Cooling and Rain water	Rod Mill
Supply/Discharge Type	Continuous	Continuous	Continuous	Continuous	Batch	Continuous	Continuous
Treatment Type	Chlorination and Fluoridation	Chlorination and Fluoridation	Chlorination and Fluoridation	Conventional Activated Sludge P Removal-Continuous	Conventional Activated Sludge P Removal-Continuous	NA	Scale Pit, Settling Lagoon and Oil Boom
Comments	Design flow is for intake pipes and mean annual flow is for entire WTP	Design flow is for intake pipes and mean annual flow is for entire WTP	Design flow is for intake pipes and mean annual flow is for entire WTP		Emergency By-Pass Outfall	Water is 75% cooling, the rest is from roof drains.	
Design Flow (1000m3/day)	150.00	590.00	230.00	900.00	900.00	30.00	NA
Mean Annual Flow (1000m3/day)	320.00	320.00	320.00	360.00	NA	1.20	47.00
Pipe length from shore (m)	600.00	808.00	846.00	0.00	0.00	2.00	0.00
Pipe Diameter (cm)	120.00	240.00	150.00	285.00	NA	122.00	Open Channel
Water Depth at end of pipe (m)	9.00	12.00	11.00	0.00	0.00	7.00	NA
Water depth above end of pipe (m)	NA	NA	NA	0.00	0.00	1.00	0.00
Diffuser	NO			NO	NO	NO	NO
Number of ports							



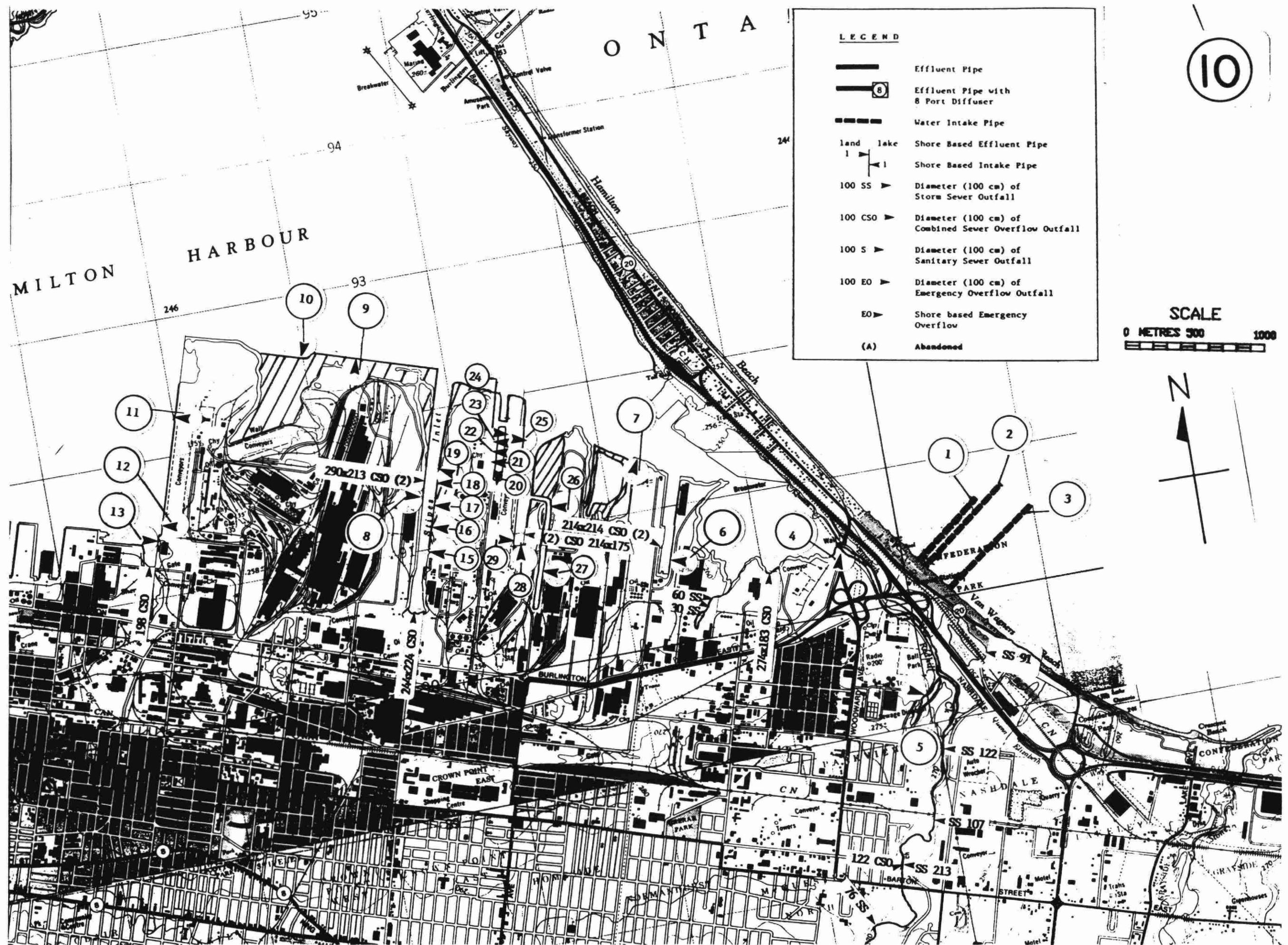
Name	Stelco Inc.	Stelco Inc.	Stelco Inc.	Stelco Inc.	Stelco Inc.	Stelco Inc.	Dofasco Inc.
Intake/Outfall	Outfall	Outfall	Intake	Outfall	Outfall	Intake	Outfall
UNIS/INIS No.	0000950006	0000950006	0000950006	0000950006	0000950006	0000950006	0001460005
Structure No.	8	9	10	11	12	13	15
Map Number	10	10	10	10	10	10	10
Operating Authority	IND	IND	IND	IND	IND	IND	IND
Location	Hamilton	Hamilton	Hamilton	Hamilton	Hamilton	Hamilton	Hamilton
Supplier/Receiver	Hamilton Harbour	Hamilton Harbour	Hamilton Harbour	Hamilton Harbour	Hamilton Harbour	Hamilton Harbour	Hamilton Harbour
Point of Discharge	Harbour	Harbour		Harbour	Harbour		Harbour
Terminal Basin	Lake Ontario	Lake Ontario	Lake Ontario	Lake Ontario	Lake Ontario	Lake Ontario	Lake Ontario
Activity	Integrated Steel	Integrated Steel	Integrated Steel	Integrated Steel	Integrated Steel	Integrated Steel	Primary Iron and Steel
	Production Facility	Production Facility	Production Facility	Production Facility	Production Facility	Production Facility	Producer
Process Type	Basic steel making	Basic steel making	Basic steel making	Basic steel making	Basic steel making	Basic steel making	All phases of steel making.
Supply/Discharge Type	Continuous	Continuous	Continuous	Continuous	Continuous	Continuous	Intermittent
Treatment Type	Scale Pit, Settling	Filters, Oil Separation,	Javex 12	None	Surface Oil Collection	Javex 12	None
	Lagoon, Oil Boom and	and Oil Boom					
	Sand Filters						
Comments	City storm sewer joins		Cooling and Process Water			Cooling and Process Water	Storm Sewer and Emergency
	outfall after treatment					Intake	Overflow for No. 2 Hot
	stage						Mill Scale Pit
Design Flow (1000m3/day)	NA	NA	616.00	NA	NA	1385.00	NA
Mean Annual Flow (1000m3/day)	570.60	168.90	283.00	278.50	74.12	701.00	NA
Pipe length from shore (m)	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pipe Diameter (cm)	Open Channel	Open Channel	396.00	253x427	183.00	270x184	137.00
Water Depth at end of pipe (m)	0.60	9.90	7.50	8.37	7.44	7.36	0.00
Water depth above end of pipe (m)	0.00	0.00	6.00	3.10	7.44	7.06	0.00
Diffuser	NO	NO		NO	NO		NO
Number of ports							



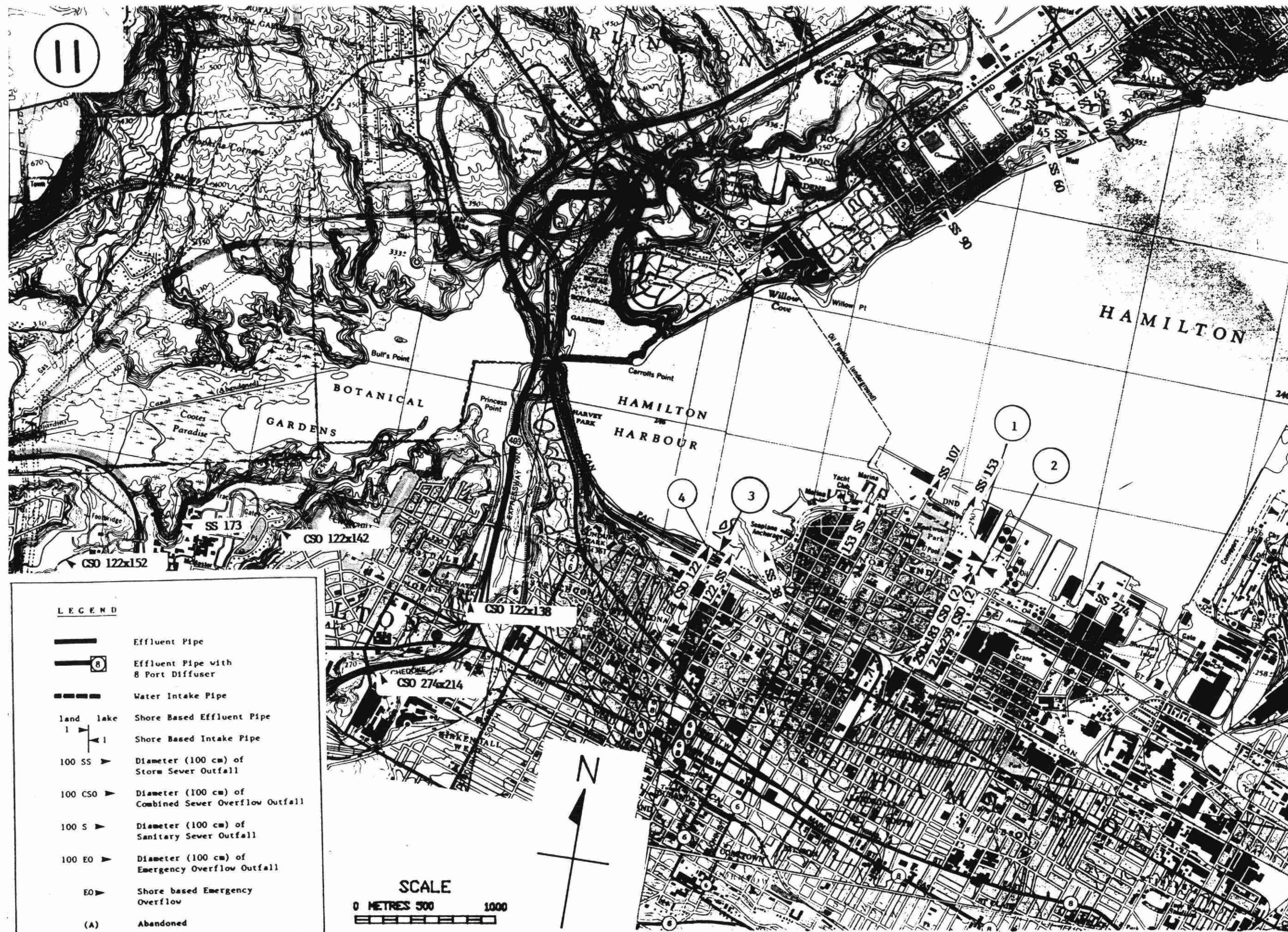
Name	Dofasco Inc.	Dofasco Inc.	Dofasco Inc.	Dofasco Inc.	Dofasco Inc.	Dofasco Inc.	Dofasco Inc.
Intake/Outfall	Outfall	Outfall	Outfall	Outfall	Intake	Intake	Intake
UMIS/INIS No.	0001460005	0001460005	0001460005	0001460005	0001460005	0001460005	0001460005
Structure No.	16	17	18	19	20	21	22
Map Number	10	10	10	10	10	10	10
Operating Authority	IND	IND	IND	IND	IND	IND	IND
Location	Hamilton	Hamilton	Hamilton	Hamilton	Hamilton	Hamilton	Hamilton
Supplier/Receiver	Hamilton Harbour	Hamilton Harbour	Hamilton Harbour	Hamilton Harbour	Hamilton Harbour	Hamilton Harbour	Hamilton Harbour
Point of Discharge	Harbour	Harbour	Harbour	Harbour			
Terminal Basin	Lake Ontario	Lake Ontario	Lake Ontario	Lake Ontario	Lake Ontario	Lake Ontario	Lake Ontario
Activity	Primary Iron and Steel	Primary Iron and Steel	Primary Iron and Steel	Primary Iron and Steel	Primary Iron and Steel	Primary Iron and Steel	Primary Iron and Steel
	Producer	Producer	Producer	Producer	Producer	Producer	Producer
Process Type	All phases of	All phases of	All phases of	All phases of	All phases of	All phases of	All phases of
	steel making.	steel making.	steel making.	steel making.	steel making.	steel making.	steel making.
Supply/Discharge Type	Intermittent	Intermittent	Continuous	Continuous	Continuous	Continuous	Continuous
Treatment Type	None	None	None	Suspended Solids Removal	Algacide and Dispersant	Solids Removal, Algacide	None
				and Phenol Removal		Dispersant, and Softening	
Comments	No. 2 Hot Mill Strip	No. 2 Hot Mill Scarfer	Non-Contact Cooling Water	West Side Sewer	No. 1 Pumphouse	No. 2 Pumphouse Intakes	No. 5 Turbo Blower
	Cooling Scale Pit	Scale Pit Emergency	from No. 2 Hot Mill and			A and B, for Steam	
	Emergency Overflow	Overflow	Melt Shop			Generation, Cooling and	
						Process Water	
Design Flow (1000m3/day)	NA	NA	NA	NA	1178.00	1178.00	1178.00
Mean Annual Flow (1000m3/day)	0.00	0.00	18.20	341.00	76.30	245.30	85.60
Pipe length from shore (m)	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pipe Diameter (cm)	76.00	76.00	229.00	183.00	244.00	244.00	244.00
Water Depth at end of pipe (m)	1.00	1.00	0.00	0.00	3.00	3.00	3.00
Water depth above end of pipe (m)	0.00	0.00	0.00	0.00	0.00	3.00	0.00
Diffuser	NO	NO	NO	NO			
Number of ports							



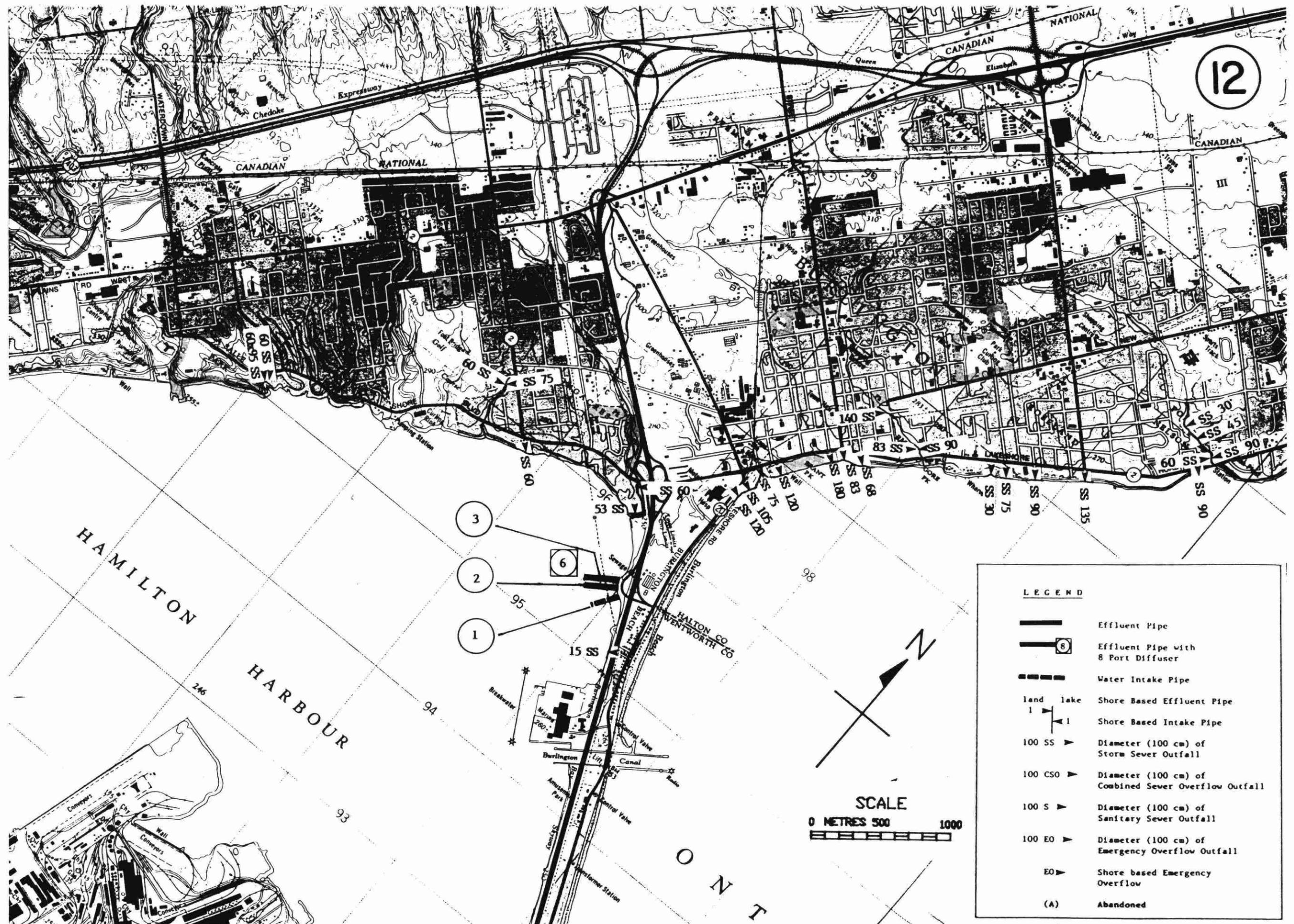
Name	Dofasco Inc.	Dofasco Inc.	Dofasco Inc.	Dofasco Inc.	Dofasco Inc.	Dofasco Inc.	Dofasco Inc.
Intake/Outfall	Intake	Intake	Outfall	Outfall	Outfall	Outfall	Outfall
UMIS/INIS No.	0001460005	0001460005	0001460005	0001460005	0001460005	0001460005	0001460005
Structure No.	23	24	25	26	27	28	29
Map Number	10	10	10	10	10	10	10
Operating Authority	IND	IND	IND	IND	IND	IND	IND
Location	Hamilton	Hamilton	Hamilton	Hamilton	Hamilton	Hamilton	Hamilton
Supplier/Receiver	Hamilton Harbour	Hamilton Harbour	Hamilton Harbour	Hamilton Harbour	Hamilton Harbour	Hamilton Harbour	Hamilton Harbour
Point of Discharge			Harbour	Harbour	Harbour	Harbour	Harbour
Terminal Basin	Lake Ontario	Lake Ontario	Lake Ontario	Lake Ontario	Lake Ontario	Lake Ontario	Lake Ontario
Activity	Primary Iron and Steel	Primary Iron and Steel	Primary Iron and Steel	Primary Iron and Steel	Primary Iron and Steel	Primary Iron and Steel	Primary Iron and Steel
	Producer	Producer	Producer	Producer	Producer	Producer	Producer
Process Type	All phases of	All phases of	All phases of	All phases of	All phases of	All phases of	All phases of
	steel making.	steel making.	steel making.	steel making.	steel making.	steel making.	steel making.
Supply/Discharge Type	Continuous	Continuous	Continuous	Intermittent	NA	Continuous	Continuous
Treatment Type	None	Algacide and Dispersant	None	None	NA	None	None
Comments	No. 4 Turbo Blower	No. 3 Pumphouse Intakes	Non-Contact Cooling	Coil Yard Storm Sewer	Special Steels Sewer	Non-Contact Cooling Water	Non-Contact Cooling
		A and B	Water Only, No. 2 Boiler			from Coke Plant and Melt	Water Only, No. 1 Boiler
		Intake B -Backup Only	House Sewer			Shop	House Sewer
Design Flow (1000m3/day)	1178.00	1178.00	NA	NA	NA	NA	NA
Mean Annual Flow (1000m3/day)	85.60	163.60	171.20	NA	NA	109.10	61.70
Pipe length from shore (m)	0.00	0.00	1.00	NA	NA	1.00	0.00
Pipe Diameter (cm)	244.00	244.00	152.40	NA	NA	168.00	122.00
Water Depth at end of pipe (m)	3.00	3.00	7.00	NA	NA	1.00	5.00
Water depth above end of pipe (m)	0.00	0.00	1.00	NA	NA	0.00	1.00
Diffuser			NO	NO	NO	NO	NO
Number of ports							



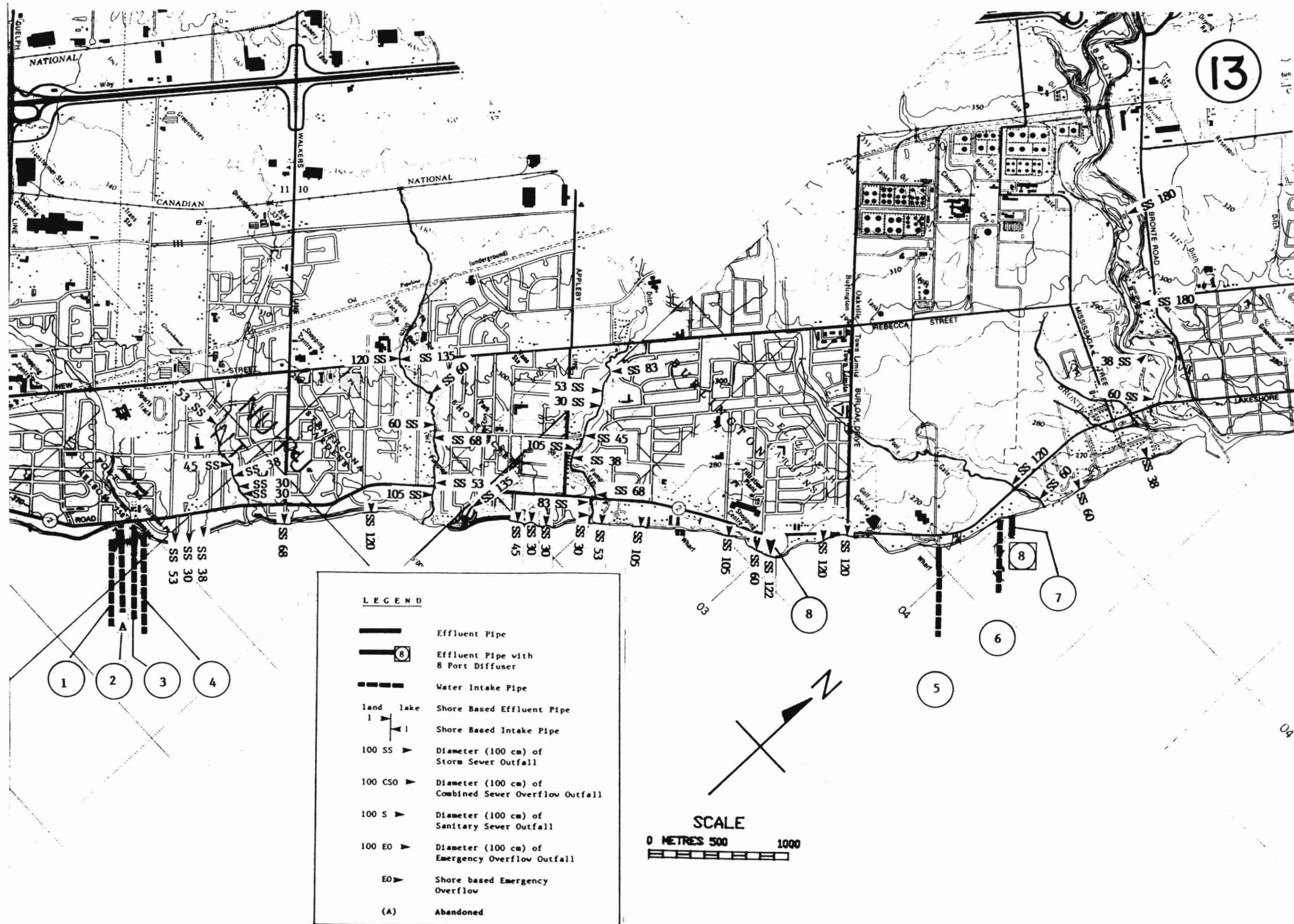
Name	Canadian Vegetable Oil	Canadian Vegetable Oil	Stelco Inc.	Stelco Inc.			
Intake/Outfall	Intake	Outfall	Intake	Outfall			
UMIS/INIS No.	NA	NA	NA	NA			
Structure No.	1	2	3	4			
Map Number	11	11	11	11			
Operating Authority	IND	IND	IND	IND			
Location	Hamilton	Hamilton	Hamilton	Hamilton			
Supplier/Receiver	Hamilton Harbour	Hamilton Harbour	Hamilton Harbour	Hamilton Harbour			
Point of Discharge		Harbour		Harbour			
Terminal Basin	Lake Ontario	Lake Ontario	Lake Ontario	Lake Ontario			
Activity	Vegetable Oil Processing	Vegetable Oil Processing	Integrated steel making	Integrated steel making			
Process Type	NA	NA	Bar Mill	Bar Mill			
Supply/Discharge Type	Continuous	Continuous	Continuous				
Treatment Type	Chlorination	Chlorination	NA				
Comments	Cooling water only	Cooling water only, which does not come in contact with process fluids					
Design Flow (1000m3/day)	NA	NA	6.20	NA			
Mean Annual Flow (1000m3/day)	36.19	36.19	1.60	NA			
Pipe length from shore (m)	0.00	0.00	NA	NA			
Pipe Diameter (cm)	76.20	30.48	NA	122.00			
Water Depth at end of pipe (m)	4.00	10.00	NA	NA			
Water depth above end of pipe (m)	0.00	0.00	NA	NA			
Diffuser		NO					
Number of ports							



Name	Skyway WPCP	Skyway WPCP	Skyway WPCP				
Intake/Outfall	Intake	Outfall	Outfall #2				
DMIS/IMIS No.	110000070	110000070	110000070				
Structure No.	1	2	3				
Map Number	12	12	12				
Operating Authority	MUN	MUN	MUN				
Location	Burlington	Burlington	Burlington				
Supplier/Receiver	Hamilton Harbour	Hamilton Harbour	Hamilton Harbour				
Point of Discharge		Harbour	Harbour				
Terminal Basin	Lake Ontario	Lake Ontario	Lake Ontario				
Activity	Municipal Sewage Treatment	Municipal Sewage Treatment	Municipal Sewage Treatment				
Process Type	Secondary Treatment	Secondary Treatment	Secondary Treatment				
Supply/Discharge Type	Continuous	Continuous	Continuous				
Treatment Type	Screens	Conventional Activated Sludge P Removal-Continuous	Conventional Activated Sludge P Removal-Continuous				
Comments	Flushing water and Chemical mixing						
Design Flow (1000m3/day)	1.60	90.90	90.90				
Mean Annual Flow (1000m3/day)	0.32	65.00	65.00				
Pipe length from shore (m)	196.00	245.00	245.00				
Pipe Diameter (cm)	40.00	245.00	180.00				
Water Depth at end of pipe (m)	3.00	5.20	6.20				
Water depth above end of pipe (m)	2.00	5.20	4.80				
Diffuser		NO	YES				
Number of ports			6				

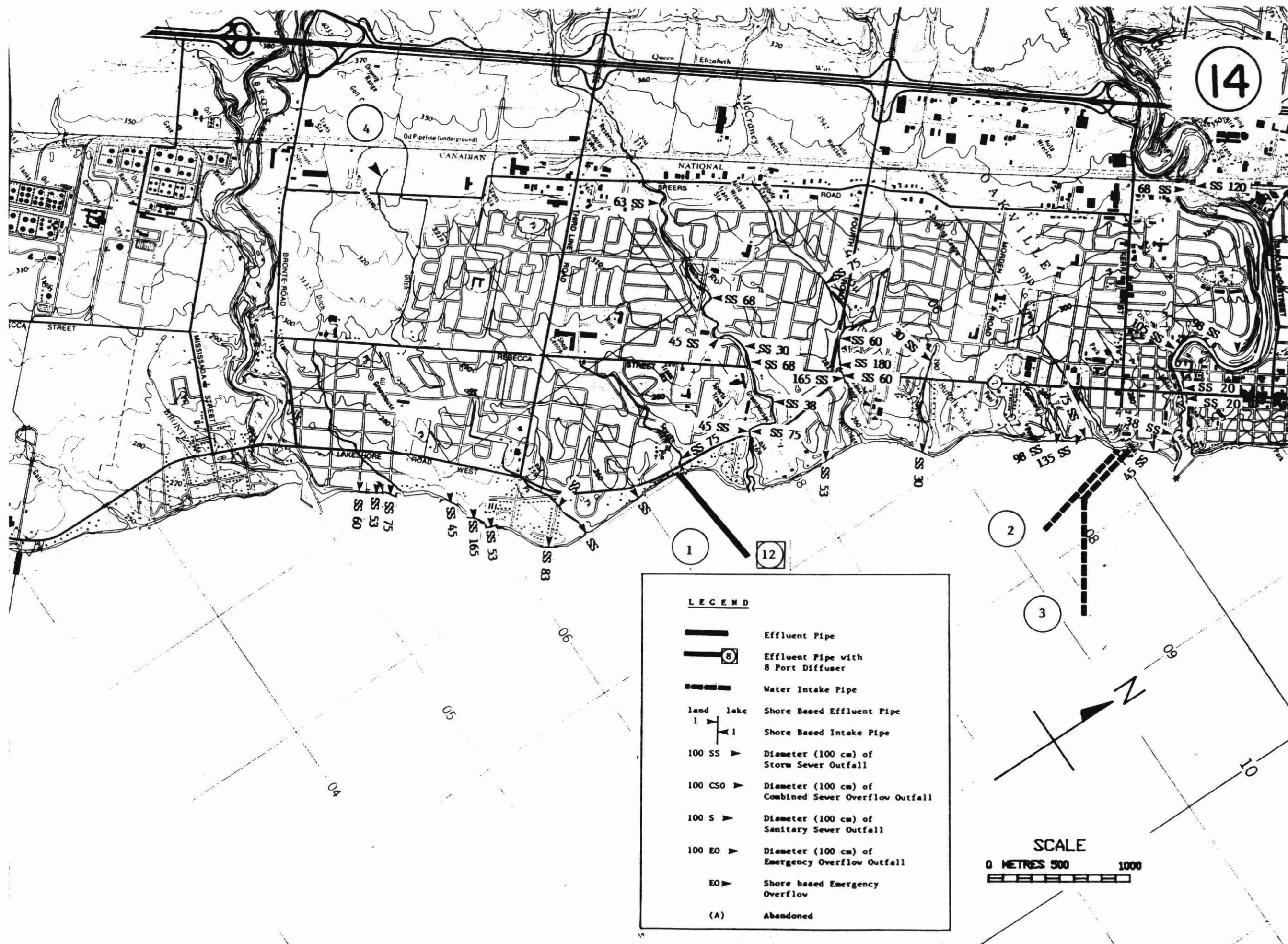


Name	Burlington WTP	Burlington WTP	Burlington WTP	Burlington WTP	Shell Canada Ltd.	Petro Canada Products	Petro Canada Products
Intake/Outfall	Intake	Intake	Intake	Intake	Intake	Intake	Outfall
OMIS/IMIS No.	220001664	220001664	220001664	220001664	NA	0000530006	0000530006
Structure No.	1	2	3	4	5	6	7
Map Number	13	13	13	13	13	13	13
Operating Authority	Halton RM	Halton RM	Halton RM	Halton RM	IND	IND	IND
Location	Burlington	Burlington	Burlington	Burlington	Oakville	Oakville	Oakville
Supplier/Receiver	Lake Ontario	Lake Ontario	Lake Ontario	Lake Ontario	Lake Ontario	Lake Ontario	Lake Ontario
Point of Discharge							Offshore
Terminal Basin	Lake Ontario	Lake Ontario	Lake Ontario	Lake Ontario	Lake Ontario	Lake Ontario	Lake Ontario
Activity	Municipal Water Treatment	Municipal Water Treatment	Municipal Water Treatment	Municipal Water Treatment	Oakville Petroleum Research Centre	Petroleum Refinery	Petroleum Refinery
Process Type	Physical and Chemical Treatment	Physical and Chemical Treatment	Physical and Chemical Treatment	Physical and Chemical Treatment	NA	Catalytic Cracking, Reforming	Catalytic Cracking, Reforming
Supply/Discharge Type	Continuous	Continuous	Continuous	Continuous	Continuous	Continuous	Continuous
Treatment Type	Filtration, Flocculation Coagulation, Chlorination	Filtration, Flocculation Coagulation, Chlorination	Filtration, Flocculation Coagulation, Chlorination	Filtration, Flocculation Coagulation, Chlorination	Travelling screen Filtering	Drinking Water-Zeolite Cooling Water-Chemical Process Water-None Boil Feed Water-Chemical	Activated Sludge
Comments		Abandoned intake line			Not a production facility	Water for drinking, cooling and process	
Design Flow (1000m3/day)	272.40	272.40	272.40	272.40	13.64	13.10	58.70
Mean Annual Flow (1000m3/day)	59.15	59.15	59.15	59.15	6.82	NA	6.80
Pipe length from shore (m)	670.60	636.30	670.60	734.00	396.20	524.00	131.00
Pipe Diameter (cm)	50.80	40.60	91.40	152.40	40.00	75.00	75.00
Water Depth at end of pipe (m)	7.53	7.53	7.53	9.29	4.60	9.30	3.40
Water depth above end of pipe (m)	7.53	7.53	7.53	9.29		8.20	2.60
Diffuser							YES
Number of ports							8

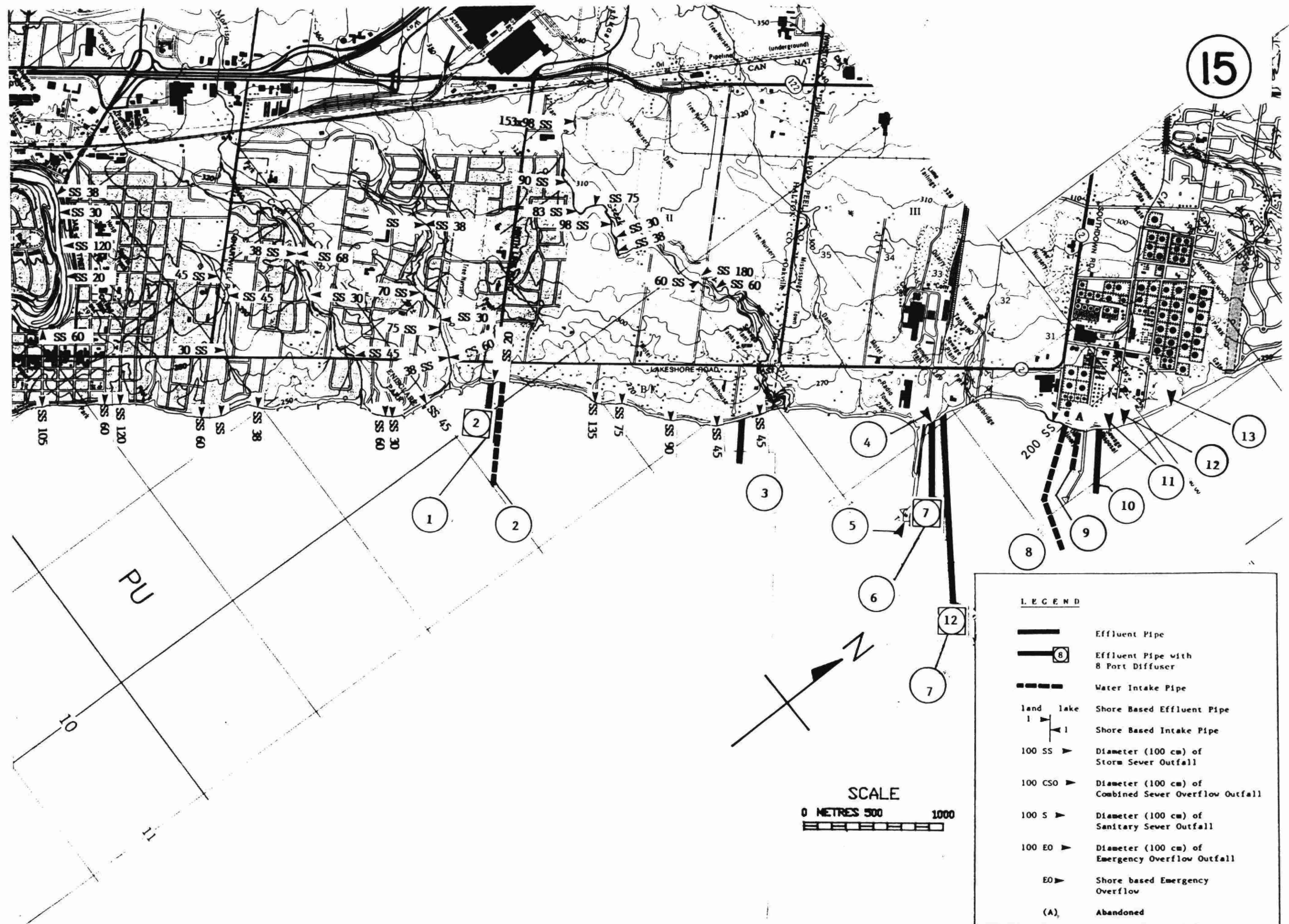


Name	Elizabeth Gardens PS						
Intake/Outfall	Outfall						
OHIS/INIS No.	NA						
Structure No.	8						
Map Number	13						
Operating Authority	Halton RM						
Location	Burlington						
Supplier/Receiver	Lake Ontario						
Point of Discharge	Shore						
Terminal Basin	Lake Ontario						
Activity	Municipal Sewage Treatment Pumping Station						
Process Type	NA						
Supply/Discharge Type	Intermittent						
Treatment Type	None						
Comments	WPCP abandoned in 1976 and replaced by a sewage pumping station with an overflow to the lake						
Design Flow (1000m3/day)	NA						
Mean Annual Flow (1000m3/day)	NA						
Pipe length from shore (m)	NA						
Pipe Diameter (cm)	45.00						
Water Depth at end of pipe (m)	NA						
Water depth above end of pipe (m)	NA						
Diffuser	NO						
Number of ports							

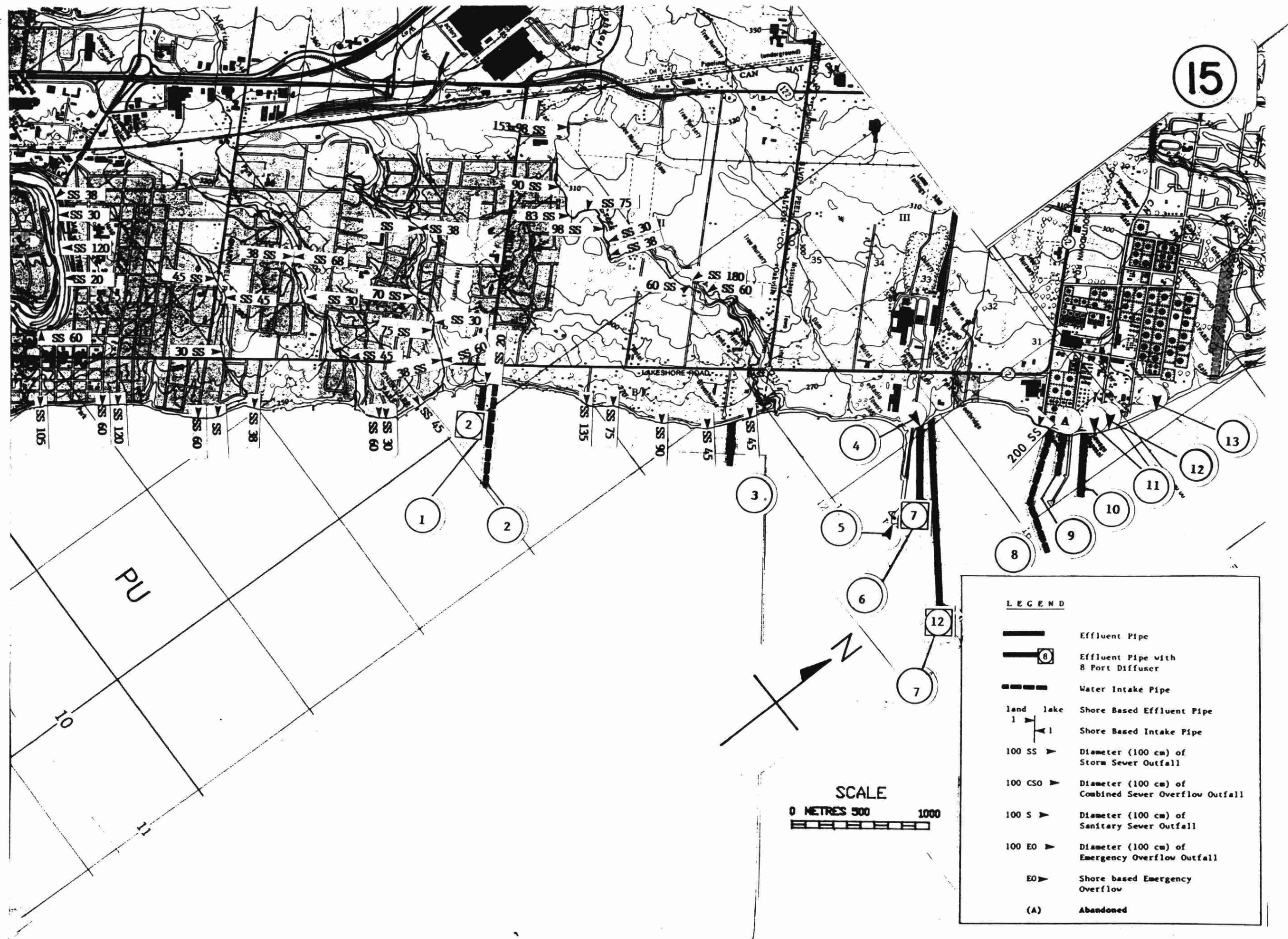
Name	South West WPCP	Oakville WTP	Oakville WTP	Union Carbide Can. Ltd.			
Intake/Outfall	Outfall	Intake #1	Intake #2	Outfall			
UNIS/INIS No.	120001005	220001637	220001637	NA			
Structure No.	1	2	3	4			
Map Number	14	14	14	14			
Operating Authority	Halton RM	Halton RM	Halton RM	IND			
Location	Oakville	Oakville	Oakville	Oakville			
Supplier/Receiver	Lake Ontario	Lake Ontario	Lake Ontario	Lake Ontario			
Point of Discharge	Offshore			River Mouth			
Terminal Basin	Lake Ontario	Lake Ontario	Lake Ontario	Lake Ontario			
Activity	Municipal Sewage Treatment	Municipal Water Treatment	Municipal Water Treatment	Packaged Gas			
Process Type	Secondary Treatment	Physical and Chemical	Physical and Chemical	NA			
Supply/Discharge Type	Continuous	Continuous	Continuous	Intermittent			
Treatment Type	Conventional Activated Sludge P Removal-Continuous Chlorination	Filtration, Flocculation Coagulation, Sedimentation Chlorination, Fluoridation	Filtration, Flocculation Coagulation, Sedimentation Chlorination, Fluoridation	None			
Comments				Stormwater discharge only			
Design Flow (1000m3/day)	372.00	109.00	109.00	NA			
Mean Annual Flow (1000m3/day)	133.00	39.42	39.42	NA			
Pipe length from shore (m)	746.00	768.00	1289.00	NA			
Pipe Diameter (cm)	180.00	75.00	213.00	45.00			
Water Depth at end of pipe (m)	10.60	7.62	10.98	NA			
Water depth above end of pipe (m)	6.70	7.62	10.00	NA			
Diffuser	YES			NO			
Number of ports	12						



Name	Ford Motor Co.	Ford Motor Co.	South East WPCP	St. Lawrence Cement	St. Lawrence Cement	Clarkson WPCP	Clarkson WPCP
Intake/Outfall	Outfall	Intake	Outfall	Outfall	Intake	Outfall #1	Outfall #2
OMIS/IMIS No.	0000020008	0000020008	120000998	NA	NA	110001328	110001328
Structure No.	1	2	3	4	5	6	7
Map Number	15	15	15	15	15	15	15
Operating Authority	IND	IND	Halton RM	IND	IND	MOE	MOE
Location	Oakville	Oakville	Oakville	Mississauga	Mississauga	Mississauga	Mississauga
Supplier/Receiver	Lake Ontario	Lake Ontario	Lake Ontario	Lake Ontario	Lake Ontario	Lake Ontario	Lake Ontario
Point of Discharge	Offshore		Offshore	Shore		Offshore	Offshore
Terminal Basin	Lake Ontario	Lake Ontario	Lake Ontario	Lake Ontario	Lake Ontario	Lake Ontario	Lake Ontario
Activity	Automobile Assembly	Automobile Assembly	Municipal Sewage Treatment	Cement Manufacturing	Cement Manufacturing	Municipal Sewage Treatment	Municipal Sewage Treatment
Process Type	Auto body preparation and assembly	Auto body preparation and assembly	Secondary Treatment	Masonry and Portland	Masonry and Portland	Secondary Treatment	Secondary Treatment
Supply/Discharge Type	Continuous	NA	Continuous	Continuous	Continuous	No Discharge	Continuous
Treatment Type	Primary Settling Lagoon	NA	Conventional Activated Sludge P Removal-Continuous	NA	NA	Out of Service since 1982	Conventional Activated Sludge with P Removal-continuous, chlorination June 15 to October 15
Comments	Discharge to be routed to municipal WPCP plant starting in mid 1988				Cooling water intake at end of wharf or docking facility	Out of Service since 1982	
Design Flow (1000m3/day)	NA	NA	22.73	10.73	NA	NA	180.00
Mean Annual Flow (1000m3/day)	12.10	NA	12.50	9.80	NA	0.00	71.00
Pipe length from shore (m)	188.97	762.00	300.00	0.00	805.00	540.00	1400.00
Pipe Diameter (cm)	152.00	91.00	105.00	35.00	61.00	107.00	180.00
Water Depth at end of pipe (m)	4.00	NA	4.00	4.00	4.50	6.00	16.50
Water depth above end of pipe (m)	2.50	NA	3.00	4.00	NA	5.50	15.50
Diffuser	YES		NO	NO		YES	YES
Number of ports	2					7	12

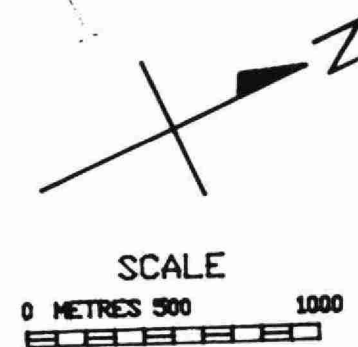


Name Intake/Outfall	Petro Canada Products Intake	Petro Canada Products Intake	Petro Canada Products Outfall	Petro Canada Products Outfall	Petro Canada Products Outfall	Petro Canada Products Outfall	Petro Canada Products Outfall
UNIS/INIS No.	0000130104	0000130104	0000130104	0000130104	0000130104	0000130104	0000130104
Structure No.	8	9	10	10	11	12	13
Map Number	15	15	15	15	15	15	15
Operating Authority	IND	IND	IND	IND	IND	IND	IND
Location	Mississauga	Mississauga	Mississauga	Mississauga	Mississauga	Mississauga	Mississauga
Supplier/Receiver	Lake Ontario	Lake Ontario	Lake Ontario	Lake Ontario	Lake Ontario	Lake Ontario	Lake Ontario
Point of Discharge			Offshore	Offshore	Shore	Shore	Shore
Terminal Basin	Lake Ontario	Lake Ontario	Lake Ontario	Lake Ontario	Lake Ontario	Lake Ontario	Lake Ontario
Activity	Petroleum Refining	Petroleum Refining	Petroleum Refining	Petroleum Refining	Petroleum Refining	Petroleum Refining	Petroleum Refining
Process Type	Crude Tapping and Vacuum Hydrogen Treating	Crude Tapping and Vacuum Hydrogen Treating	Crude Tapping and Vacuum Hydrogen Treating	Crude Tapping and Vacuum Hydrogen Treating	Crude Tapping and Vacuum Hydrogen Treating	Crude Tapping and Vacuum Hydrogen Treating	Crude Tapping and Vacuum Hydrogen Treating
Supply/Discharge Type	Continuous	None	Continuous	Intermittent	Continuous	Continuous	Intermittent
Treatment Type	Travelling Screens, Hot Lime Softner and Zeolite on boiler feed only	None	A.P.I Separator Oil Skimming	A.P.I Separator Sand Filtration Activated Sludge	A.P.I Separator	A.P.I Separator	Settling Basin and Oil Skimming
Comments		Intake Not in Use	Once Through Cooling Water from Trap 3	Treatment Plant Effluent is Combined with Trap 3 Effluent & Discharged	Once Through Cooling Water Trap 2 effluent	Once Through Cooling Water Trap 1 effluent	Storm Water only goes To Lake if rain volume exceeds treatment plant capacity
Design Flow (1000m3/day)	NA	NA	NA	16.34	NA	NA	NA
Mean Annual Flow (1000m3/day)	228.82	NA	9.08	13.62	NA	90.80	NA
Pipe length from shore (m)	937.20	306.00	472.44	472.44	0.00	0.00	0.00
Pipe Diameter (cm)	213.00	107.00	107.00	107.00	107.00	107.00	137.16
Water Depth at end of pipe (m)	10.60	8.50	7.30	7.30	NA	NA	0.00
Water depth above end of pipe (m)	9.70	4.60	6.80	6.80	NA	NA	0.00
Diffuser			NO	NO	NO	NO	NO
Number of ports							

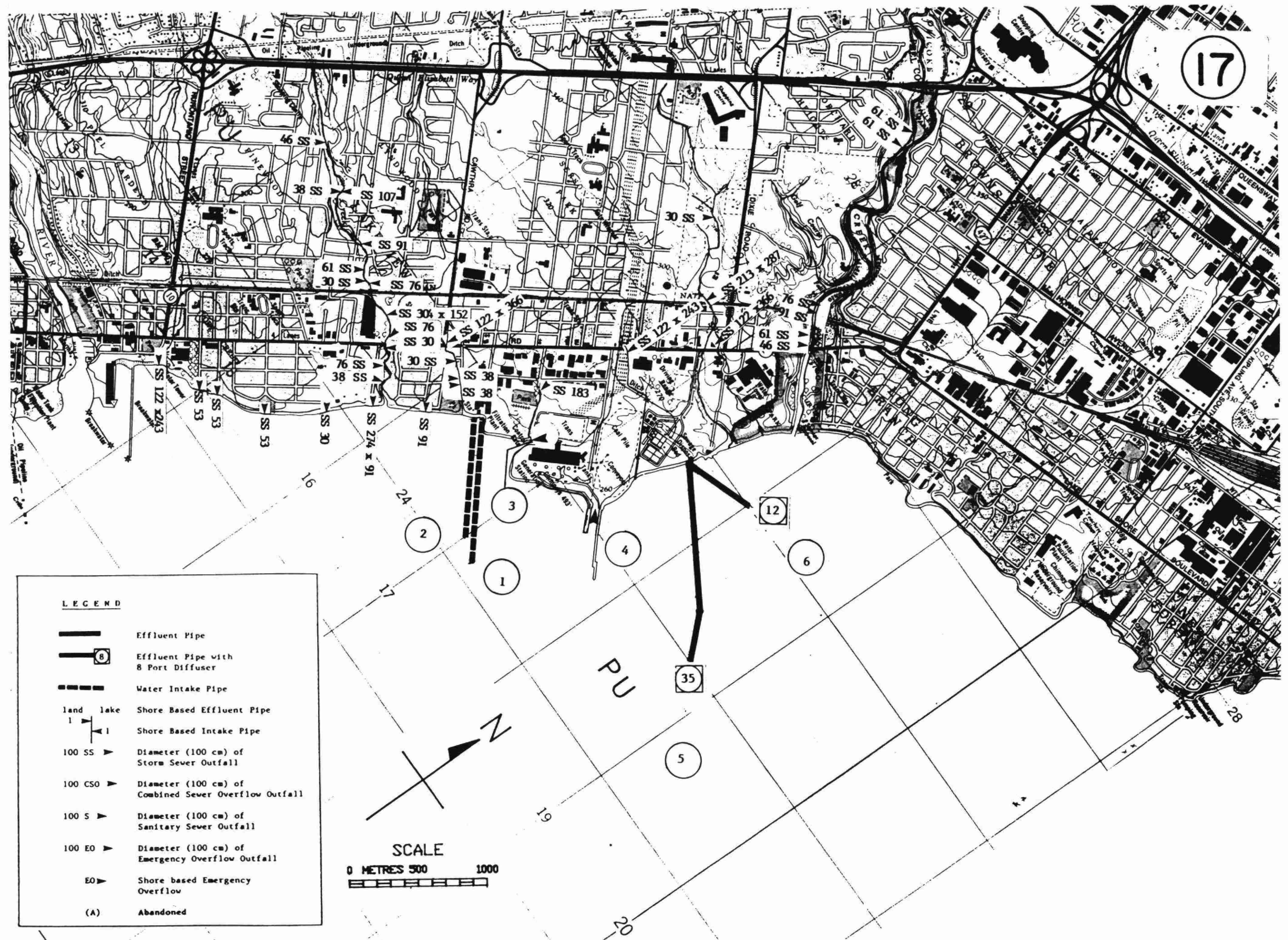


Name	Lorne Park WTP	Texaco Canada Inc.	Texaco Canada Inc.	St. Lawrence Starch Co.	St. Lawrence Starch Co.	St. Lawrence Starch Co.	St. Lawrence Starch Co.
Intake/Outfall	Intake	Outfall	Intake	Intake	Outfall	Outfall	Outfall
UNIS/INIS No.	210001317	0000520106	0000520106	NA	NA	NA	NA
Structure No.	1	2	3	4	5	6	7
Map Number	16	16	16	16	16	16	16
Operating Authority	MOE	IND	IND	IND	IND	IND	IND
Location	Mississauga	Mississauga	Mississauga	Mississauga	Mississauga	Mississauga	Mississauga
Supplier/Receiver	Lake Ontario	Lake Ontario	Lake Ontario	Lake Ontario	Lake Ontario	Lake Ontario	Lake Ontario
Point of Discharge		Shore			Shore	Shore	Shore
Terminal Basin	Lake Ontario	Lake Ontario	Lake Ontario	Lake Ontario	Lake Ontario	Lake Ontario	Lake Ontario
Activity	Municipal Water Treatment	Petroleum Refinery	Petroleum Refinery	Food Processing and Related Products	Food Processing and Related Products	Food Processing and Related Products	Food Processing and Related Products
Process Type	Physical and Chemical Treatment	NA	NA	Wet Corn Milling Produces, Sweeteners, Starches, Cattle Feed, Glucose and Alcohol	Wet Corn Milling Produces, Sweeteners, Starches, Cattle Feed, Glucose and Alcohol	Wet Corn Milling Produces, Sweeteners, Starches, Cattle Feed, Glucose and Alcohol	Wet Corn Milling Produces, Sweeteners, Starches, Cattle Feed, Glucose and Alcohol
Supply/Discharge Type	Continuous	None	None	Continuous	Continuous	Continuous	Continuous
Treatment Type	Chlorination and Fluoridation	API separator + Lagoon	Filter Screens	Cooling water- Burn Basket	None	None	None
Comments	Began operating in 1983	Decommissioning through 1987. Two outfall pipes	Decommissioning through 1987.		Heat Exchanger Water Only	Heat Exchanger Water Only	Heat Exchanger Water Only
Design Flow (1000m3/day)	450.00	136.00	NA	45.78	50.00	50.00	50.00
Mean Annual Flow (1000m3/day)	120.00	7.00	NA	29.40	28.21	28.21	28.21
Pipe length from shore (m)	1250.00	0.00	780.00	784.00	0.00	0.00	0.00
Pipe Diameter (cm)	180.00	122.00	NA	60.96	100.00	30.00	61.00
Water Depth at end of pipe (m)	13.20	2.00	NA	9.53	0.10	0.40	2.00
Water depth above end of pipe (m)	11.50	0.50	NA	8.53	0.00	0.00	0.00
Diffuser		NO			NO	NO	NO
Number of ports							

	Effluent Pipe
	Effluent Pipe with 8 Port Diffuser
	Water Intake Pipe
land lake 	Shore Based Effluent Pipe
	Shore Based Intake Pipe
100 SS	Diameter (100 cm) of Storm Sewer Outfall
100 CSO	Diameter (100 cm) of Combined Sewer Overflow Outfall
100 S	Diameter (100 cm) of Sanitary Sewer Outfall
100 EO	Diameter (100 cm) of Emergency Overflow Outfall
EO	Shore based Emergency Overflow
(A)	Abandoned



Name	Lakeview WTP	Lakeview WTP	Lakeview TGS	Lakeview TGS	Lakeview WPCP	Lakeview WPCP	
Intake/Outfall	Intake	Intake	Outfall	Intake	Outfall	Outfall	
DMIS/IMIS No.	210000568	210000568	NA	NA	NA	NA	
Structure No.	1	2	3	4	5	6	
Map Number	17	17	17	17	17	17	
Operating Authority	MOE	MOE	Ontario Hydro	Ontario Hydro	MOE	MOE	
Location	Mississauga	Mississauga	Mississauga	Mississauga	Mississauga	Mississauga	
Supplier/Receiver	Lake Ontario	Lake Ontario	Lake Ontario	Lake Ontario	Lake Ontario	Lake Ontario	
Point of Discharge			Shore		Offshore	Offshore	
Terminal Basin	Lake Ontario	Lake Ontario	Lake Ontario	Lake Ontario	Lake Ontario	Lake Ontario	
Activity	Municipal Water Treatment	Municipal Water Treatment	Electrical Generating Station	Electrical Generating Station	Municipal Sewage Treatment	Municipal Sewage Treatment	
Process Type	Physical and Chemical Treatment	Physical and Chemical Treatment	Coal Fired Thermal Generation	Coal Fired Thermal Generation	Secondary Treatment	Secondary Treatment	
Supply/Discharge Type	None	Continuous	Continuous	Continuous	Continuous	None	
Treatment Type	Chlorination and Fluoridation	Chlorination and Fluoridation	Bar racks Vertical Travelling Screens	Bar racks Vertical Travelling Screens	Conventional Activated Sludge P Removal-Continuous	Conventional Activated Sludge P Removal-Continuous	
Comments	Out of Service Since 1962		Cooling water outfall is a channel not a pipe		Cooling water intake is a channel not a pipe		Out of Service Since 1977
Design Flow (1000m3/day)	350.00	350.00	5961.60	5961.10	800.00	800.00	
Mean Annual Flow (1000m3/day)	0.00	195.00	2372.00	2372.00	231.00	0.00	
Pipe length from shore (m)	850.00	1030.00	0.00	550.00	1430.00	550.00	
Pipe Diameter (cm)	76.00	168.00	1140.00	1140.00	366.00	152.00	
Water Depth at end of pipe (m)	NA	9.30	5.50	4.60	11.00	4.50	
Water depth above end of pipe (m)	NA	7.60	NA	4.60	10.00	3.50	
Diffuser			NO		YES	YES	
Number of ports					35	12	

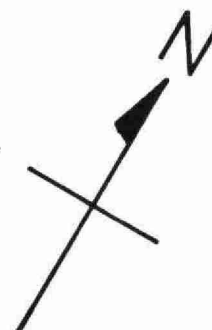
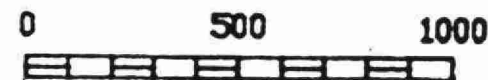


Name	Long Branch STP	R. L. Clark WTP	New Toronto WTP	New Toronto WTP	New Toronto WTP	TWP of Etobicoke STP	Chrysler Canada Ltd.
Intake/Outfall	Outfall	Intake	Intake #1	Intake #2	Intake #3	Outfall	Outfall
UNIS/IMIS No.	NA	220002253	NA	NA	NA	NA	NA
Structure No.	1	2	3	4	5	6	7
Map Number	18	18	18	18	18	18	18
Operating Authority	MUN	MUN	MUN	MUN	MUN	MUN	IND
Location	Etobicoke	Etobicoke	Etobicoke	Etobicoke	Etobicoke	Etobicoke (Mimico)	Etobicoke
Supplier/Receiver	Lake Ontario	Lake Ontario	Lake Ontario	Lake Ontario	Lake Ontario	Lake Ontario	Lake Ontario
Point of Discharge	Offshore					River Mouth	River Mouth
Terminal Basin	Lake Ontario	Lake Ontario	Lake Ontario	Lake Ontario	Lake Ontario	Lake Ontario	Lake Ontario
Activity	Combined Sewer Overflow	Municipal Water Treatment	Municipal Water Treatment	Municipal Water Treatment	Municipal Water Treatment	Municipal Sewage Treatment	Automobile Parts Mfg
Process Type	NA	Physical and Chemical Treatment	NA	NA	NA	NA	Aluminum Casting Plant
Supply/Discharge Type	Intermittent	Continuous	Continuous	Continuous	Continuous	None	Batch
Treatment Type	None	Filtration, Chlorination Fluoridation	Screened	Screened	Screened	NA	None
Comments	Long Branch Overflow No confirmed dye testing for location of the end of pipe.		Raw Water Supply for Intake Pipe Shutdown	Raw Water Supply for Goodyear Tire Co. which closed March 1987	Raw Water Supply for Humber STP	Plant Decommissioned	City supplied cooling for dyes and machines Discharge to small creek then to lake
Design Flow (1000m3/day)	NA	660.00	130.00	130.00	130.00	NA	NA
Mean Annual Flow (1000m3/day)	NA	400.90	NA	NA	NA	NA	1.00
Pipe length from shore (m)	152.00	1640.00	550.00	550.00	550.00	366.00	0.00
Pipe Diameter (cm)	121.90	330.00	61.00	91.00	107.00	NA	46.00
Water Depth at end of pipe (m)	NA	20.00	7.60	7.60	7.60	NA	0.00
Water depth above end of pipe (m)	NA	NA	NA	NA	NA	NA	0.00
Diffuser	NO					NO	NO
Number of ports							



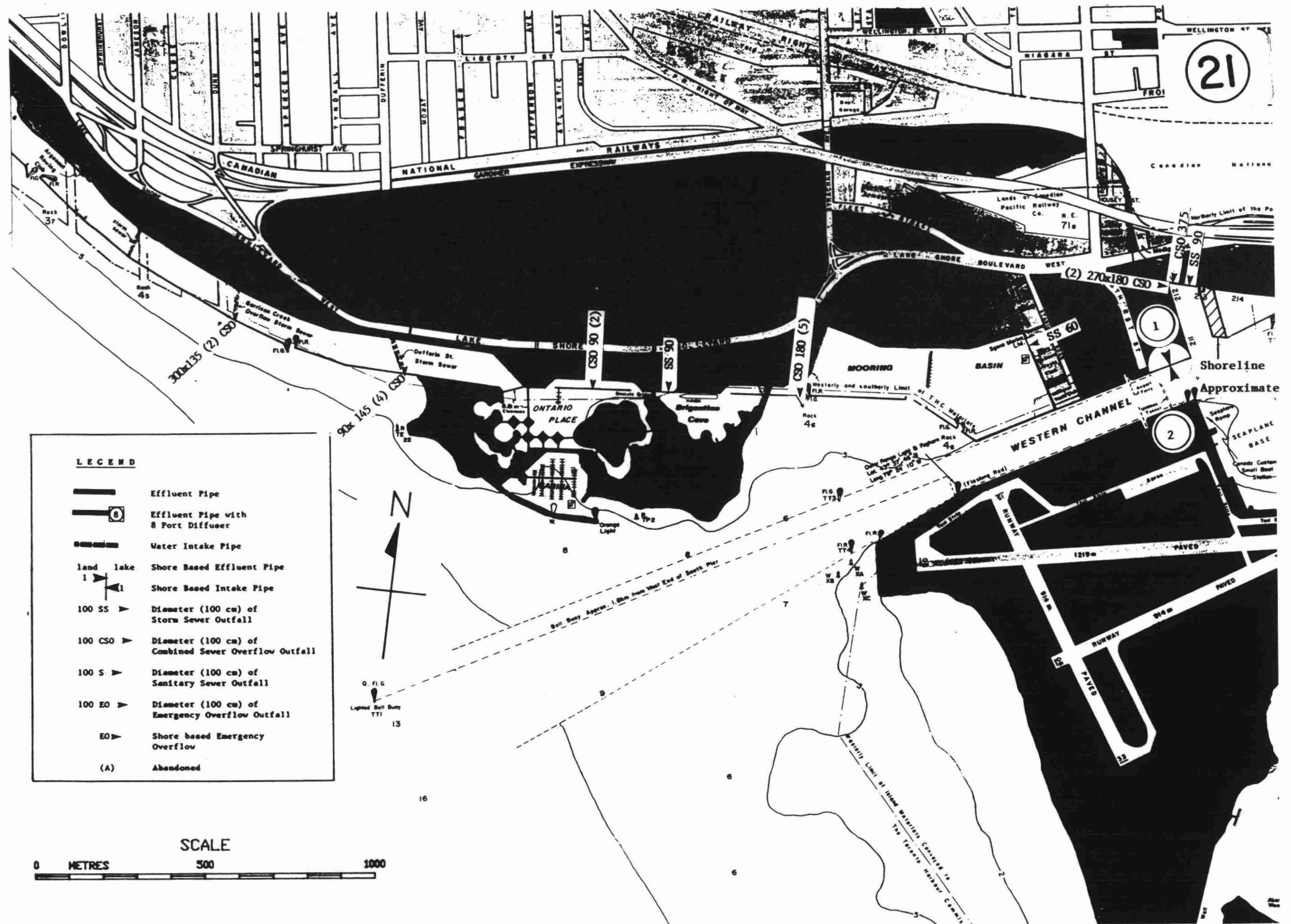
LEGEND

- | | |
|---|---|
|  | Effluent Pipe |
|  | Effluent Pipe with
8 Port Diffuser |
|  | Water Intake Pipe |
| land lake
 | Shore Based Effluent Pipe |
| 100 SS  | Diameter (100 cm) of
Storm Sever Outfall |
| 100 CSO  | Diameter (100 cm) of
Combined Sewer Overflow Outfall |
| 100 S  | Diameter (100 cm) of
Sanitary Sewer Outfall |
| 100 EO  | Diameter (100 cm) of
Emergency Overflow Outfall |
| EO  | Shore based Emergency
Overflow |
| (A) | Abandoned |

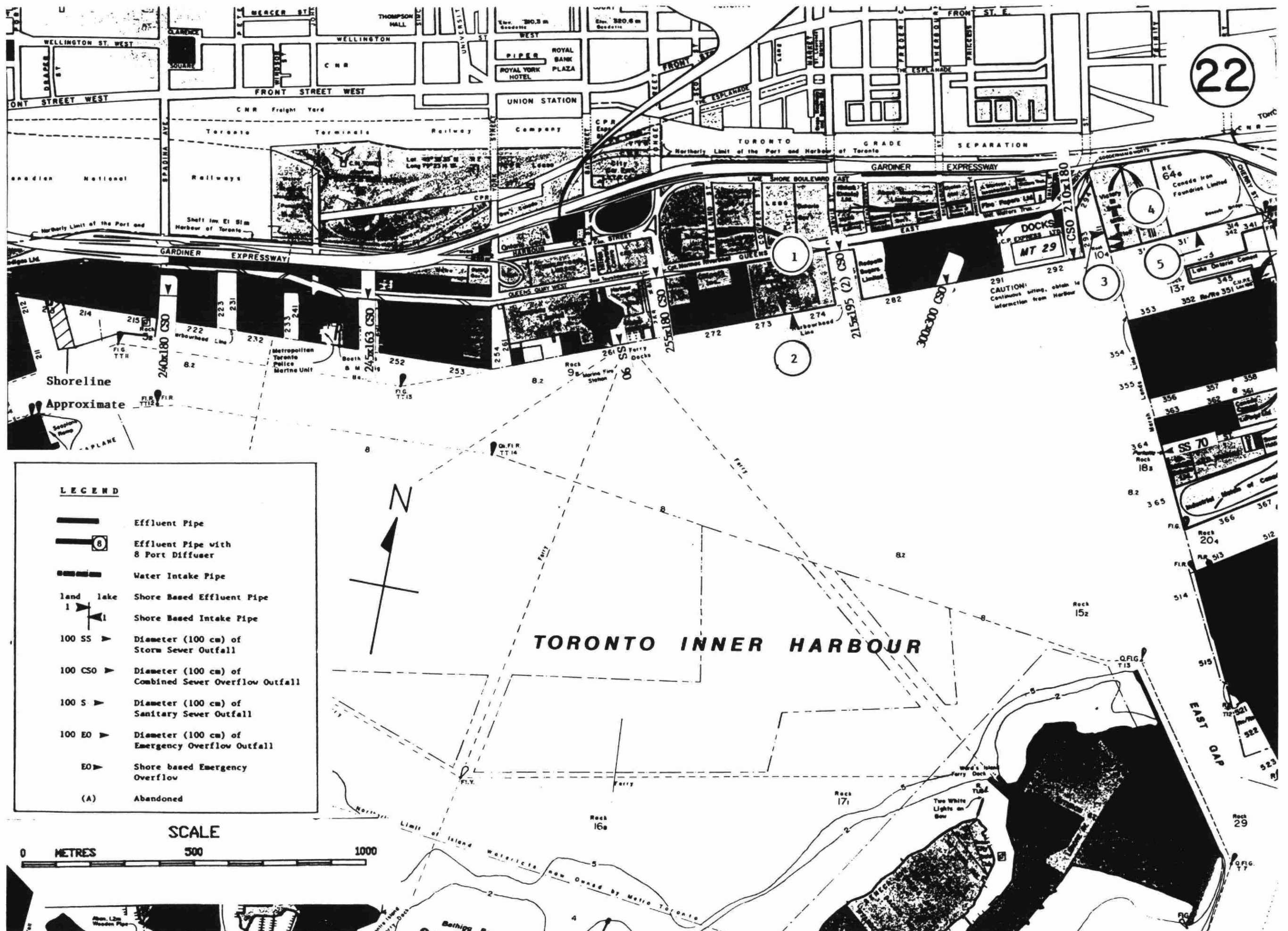


Name	Number STP						
Intake/Outfall	Outfall						
UMIS/IMIS No.	120000382						
Structure No.	1						
Map Number	20						
Operating Authority	Metro Toronto RM						
Location	Etobicoke						
Supplier/Receiver	Lake Ontario						
Point of Discharge	Embayment						
Terminal Basin	Lake Ontario						
Activity	Municipal Sewage Treatment						
Process Type	Secondary Treatment						
Supply/Discharge Type	Continuous						
Treatment Type	Activated Sludge, Aeration; P Removal-Continuous Summer Chlorination June through October						
Comments							
Design Flow (1000m3/day)	1080.00						
Mean Annual Flow (1000m3/day)	408.00						
Pipe length from shore (m)	603.00						
Pipe Diameter (cm)	274.00						
Water Depth at end of pipe (m)	9.80						
Water depth above end of pipe (m)	5.50						
Diffuser	YES						
Number of ports	15						

Name	Canada Malting Co. Ltd.	Canada Malting Co. Ltd.					
Intake/Outfall	Outfall	Intake					
OHIS/INIS No.	NA	NA					
Structure No.	1	2					
Map Number	21	21					
Operating Authority	IND	IND					
Location	Toronto	Toronto					
Supplier/Receiver	Toronto Harbour	Toronto Harbour					
Point of Discharge	Harbour						
Terminal Basin	Lake Ontario	Lake Ontario					
Activity	Processing of food and related products	Processing of food and related products					
Process Type	Malt Manufacturing	Malt Manufacturing					
Supply/Discharge Type	Seasonal	Seasonal					
Treatment Type	None	None					
Comments	Cooling water discharge during June, July and August	Cooling water intake during June, July and August					
Design Flow (1000m3/day)	20.10	20.10					
Mean Annual Flow (1000m3/day)	1.80	1.80					
Pipe length from shore (m)	0.00	0.00					
Pipe Diameter (cm)	20.00	20.00					
Water Depth at end of pipe (m)	2.00	1.20					
Water depth above end of pipe (m)	2.00	1.20					
Diffuser	NO						
Number of ports							



Name	Redpath Sugar	Redpath Sugar	Victory Soya Mills	Victory Soya Mills	Canron Inc.		
Intake/Outfall	Outfall	Intake	Intake	Outfalls	Intake		
UMIS/INIS No.	NA	NA	NA	NA	NA		
Structure No.	1	2	3	4	5		
Map Number	22	22	22	22	22		
Operating Authority	IND	IND	IND	IND	IND		
Location	Toronto	Toronto	Toronto	Toronto	Toronto		
Supplier/Receiver	Toronto Harbour	Toronto Harbour	Toronto Harbour	Toronto Harbour	Toronto Harbour		
Point of Discharge	Harbour			Harbour			
Terminal Basin	Lake Ontario	Lake Ontario	Lake Ontario	Lake Ontario	Lake Ontario		
Activity	Processing of food and related products	Processing of food and related products	Processing of food and related products	Processing of food and related products	Production of Iron and Steel related products		
Process Type	Cane Sugar Refining	Cane Sugar Refining	Soya Bean Processing	Soya Bean Processing	Ductile Iron Pipe Manufacturing		
Supply/Discharge Type	Continuous	Continuous	Continuous	Continuous	None		
Treatment Type	NA	NA	Filtered Only	NA	Screened Only Non-contact cooling water		
Comments	Cooling Water Outfall	Raw Water Intake for cooling water only	Cooling water intake	Two cooling water outfall pipes	Plant closed Feb. 1986		
Design Flow (1000m3/day)	26.00	26.00	16.30	16.30	30.30		
Mean Annual Flow (1000m3/day)	14.00	14.00	16.00	16.00	17.70		
Pipe length from shore (m)	0.00	0.00	0.00	0.00	0.00		
Pipe Diameter (cm)	61.00	45.00	20.00	20.00	20.30		
Water Depth at end of pipe (m)	NA	NA	6.00	6.00	2.00		
Water depth above end of pipe (m)	NA	NA	3.00	NA	1.00		
Diffuser	NO			NO			
Number of ports							

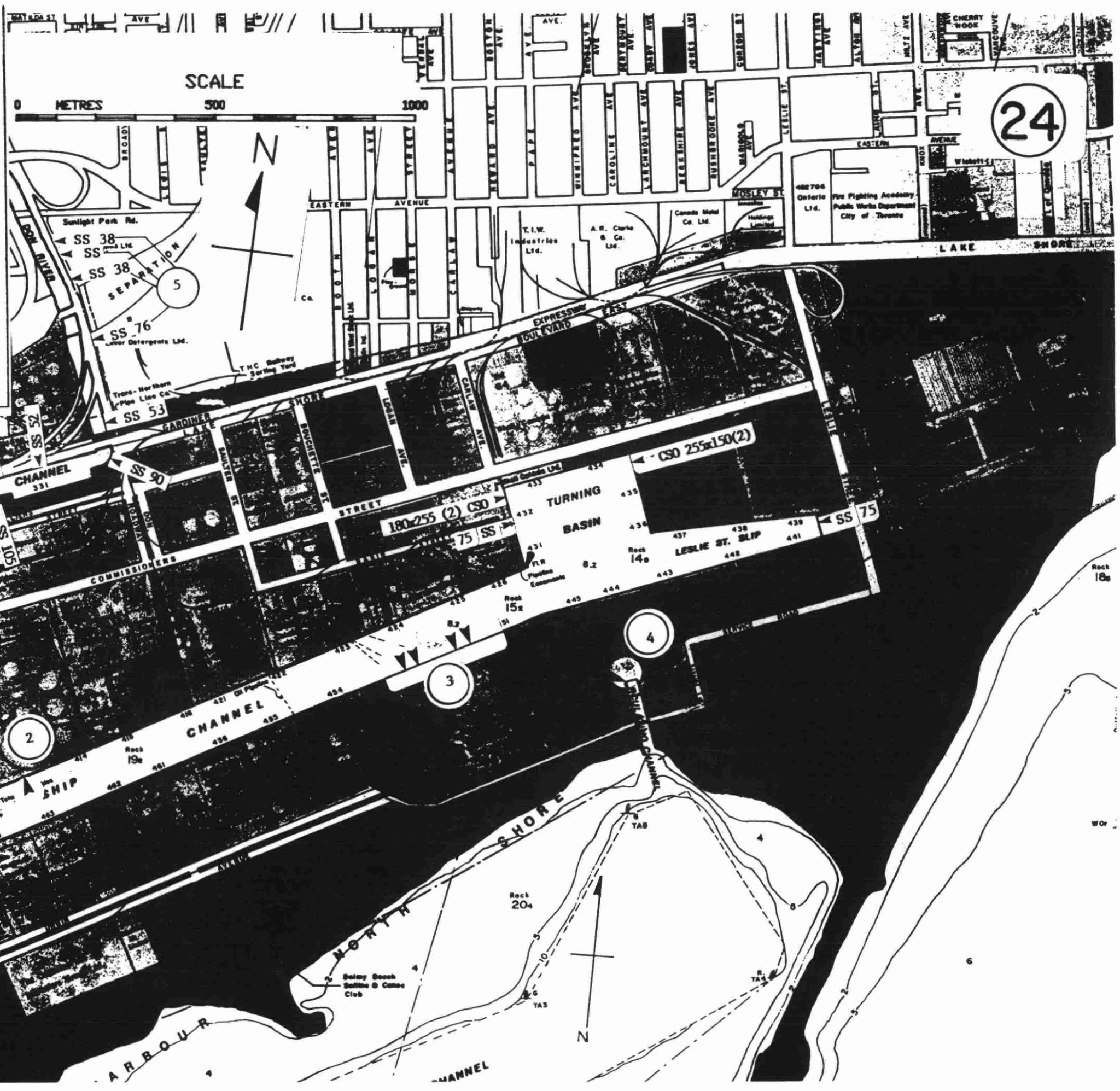


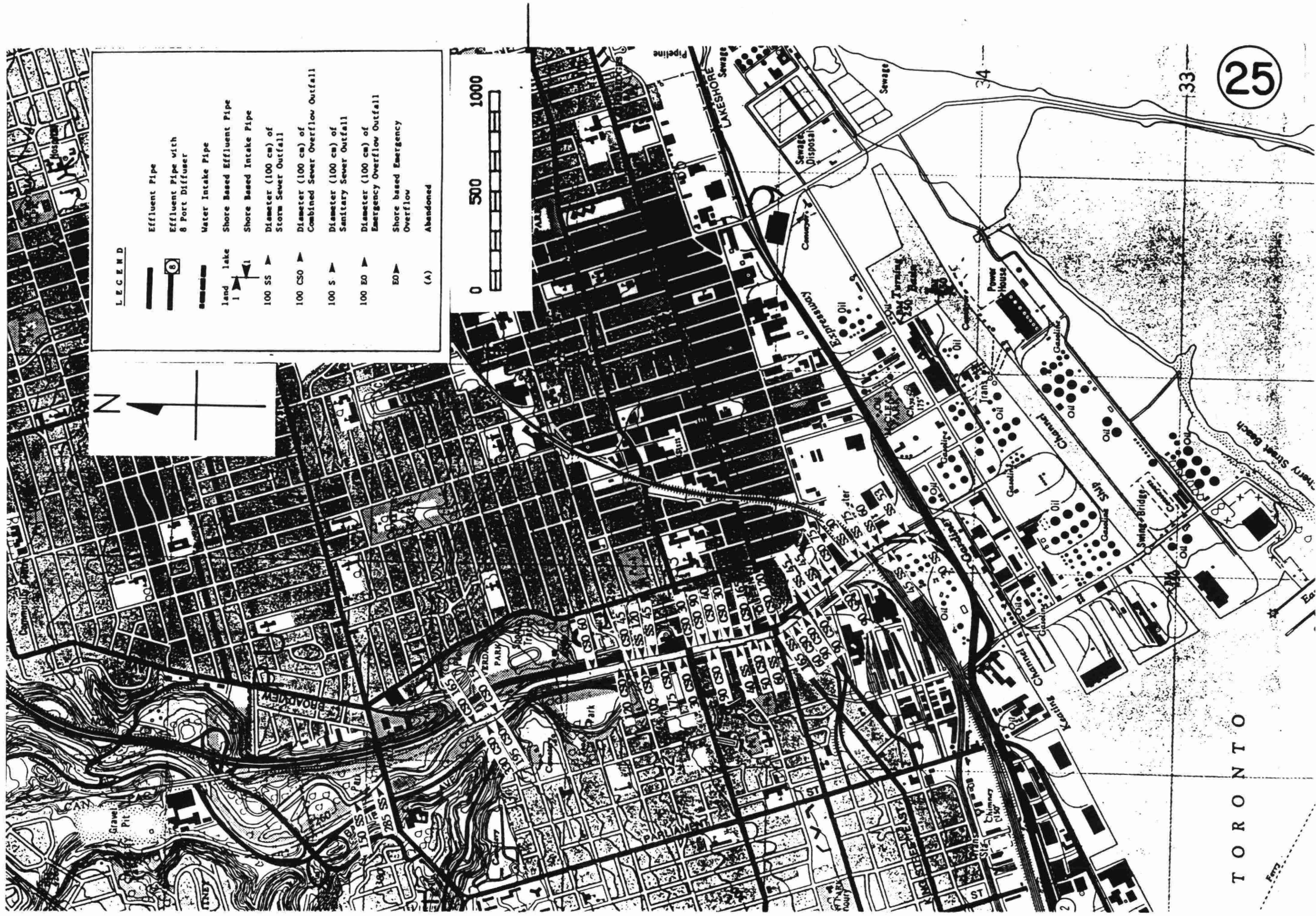
Name	Island Filtration Plant	Island Filtration Plant					
Intake/Outfall	Intake #1	Intake #2					
UMIS/IMIS No.	220002244	220002244					
Structure No.	1	2					
Map Number	23	23					
Operating Authority	Meto Toronto RM	Meto Toronto RM					
Location	Toronto	Toronto					
Supplier/Receiver	Lake Ontario	Lake Ontario					
Point of Discharge							
Terminal Basin	Lake Ontario	Lake Ontario					
Activity	Municipal Water Treatment	Municipal Water Treatment					
Process Type	Physical and Chemical Treatment	Physical and Chemical Treatment					
Supply/Discharge Type	Continuous (when in use)	Continuous (when in use)					
Treatment Type	Filtration Chlorination and Fluoridation	Filtration Chlorination and Fluoridation					
Comments	Plant usually operated for summer months only	Plant usually operated for summer months only					
Design Flow (1000m3/day)	480.00	480.00					
Mean Annual Flow (1000m3/day)	164.00	164.00					
Pipe length from shore (m)	731.00	823.00					
Pipe Diameter (cm)	180.00	180.00					
Water Depth at end of pipe (m)	21.60	11.00					
Water depth above end of pipe (m)	NA	NA					
Diffuser							
Number of ports							

Name	Texaco Canada Inc.	Texaco Canada Inc.	R. L. Hearn TGS	R. L. Hearn TGS	Lever Brothers		
Intake/Outfall	Outfall	Intake	Intakes	Outfall	Outfalls		
UMIS/IMIS No.	NA	NA	NA	NA	NA		
Structure No.	1	2	3	4	5		
Map Number	24	24	24	24	24		
Operating Authority	IND	IND	Ontario Hydro	Ontario Hydro	IND		
Location	Toronto	Toronto	Toronto	Toronto	Toronto		
Supplier/Receiver	Toronto Harbour	Toronto Harbour	Toronto Harbour	Toronto Harbour	Don River		
Point of Discharge	Harbour			Harbour	River Mouth		
Terminal Basin	Lake Ontario	Lake Ontario	Lake Ontario	Lake Ontario	Lake Ontario		
Activity	Lube Oil Blending	Lube Oil Blending	Electrical Generating Station	Electrical Generating Station	Detergent and Soap Manufacturing		
Process Type	NA	NA	Coal Fired Thermal Generation	Coal Fired Thermal Generation	NA		
Supply/Discharge Type	Continuous	Continuous	Continuous (when in use)	Continuous (when in use)	Intermittent		
Treatment Type	API Separator	Various water softeners	Bar racks and vertical travelling screens	Bar racks and vertical travelling screens	None		
Comments		Industrial water intake for boiler units	Plant Mothballed Four cooling water intake ports	Plant Mothballed	Four Stormwater Outfalls		
Design Flow (1000m3/day)	0.10	2.60	2505.60	2505.60	NA		
Mean Annual Flow (1000m3/day)	1.30	0.80	389.00	389.00	NA		
Pipe length from shore (m)	0.00	0.00	0.00	0.00	0.00		
Pipe Diameter (cm)	60.00	30.00	0.00	NA	38.00		
Water Depth at end of pipe (m)	9.00	9.00	NA	5.00	NA		
Water depth above end of pipe (m)	2.00	2.00	NA	0.00	NA		
Diffuser	NO			NO	NO		
Number of ports							

LEGEND

- Effluent Pipe
- Effluent Pipe with 8 Port Diffuser
- Water Intake Pipe
- Shore Based Effluent Pipe
- Shore Based Intake Pipe
- Diameter (100 cm) of Storm Sewer Outfall
- Diameter (100 cm) of Combined Sewer Overflow Outfall
- Diameter (100 cm) of Sanitary Sewer Outfall
- Diameter (100 cm) of Emergency Overflow Outfall
- Shore based Emergency Overflow
- Abandoned



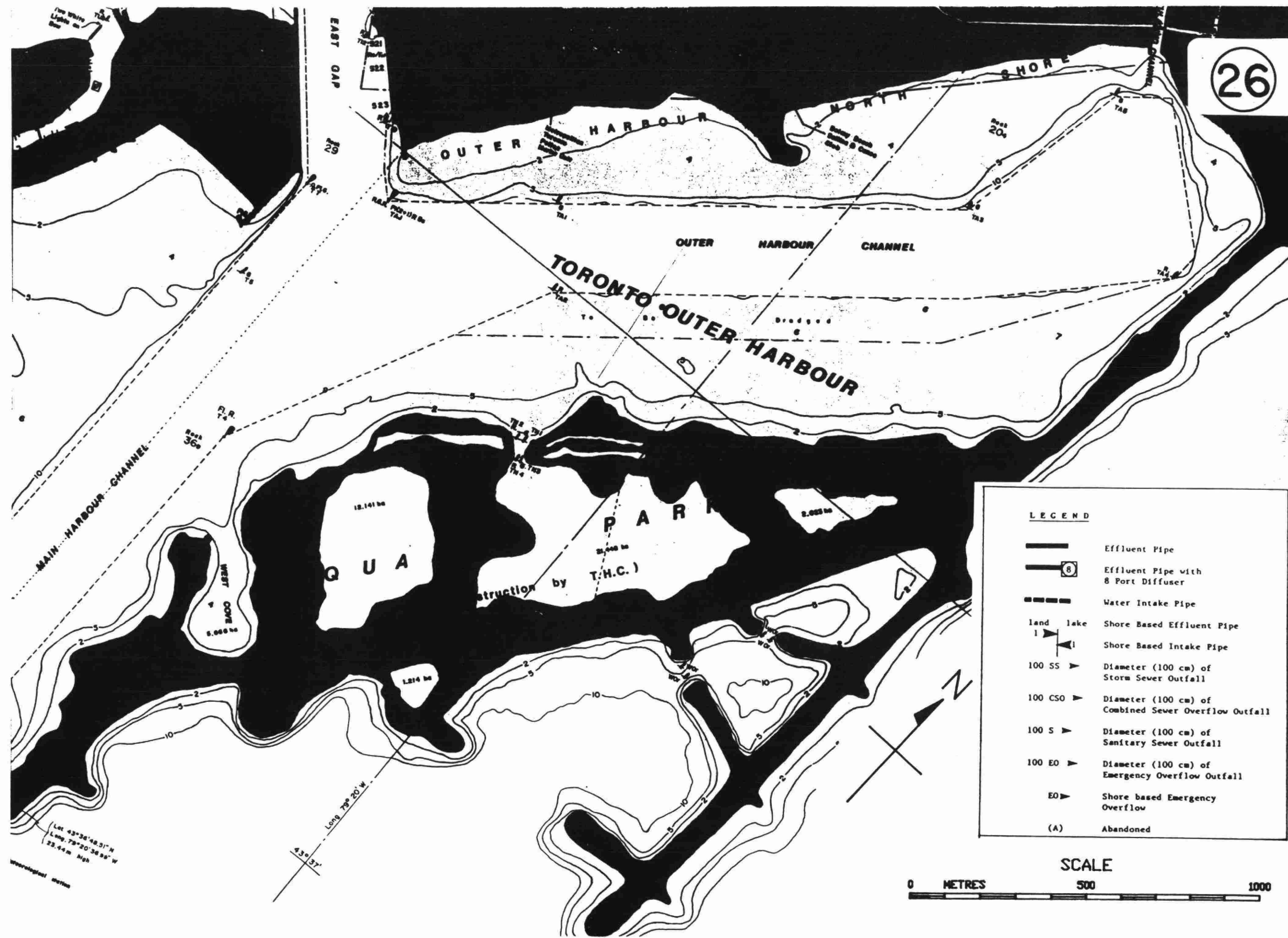


LEGEND

- Effluent Pipe
- Effluent Pipe with 8 Port Diffuser
- Water Intake Pipe
- Shore Based Effluent Pipe
- Shore Based Intake Pipe
- Diameter (100 cm) of Storm Sewer Outfall
- Diameter (100 cm) of Combined Sewer Overflow Outfall
- Diameter (100 cm) of Sanitary Sewer Outfall
- Diameter (100 cm) of Emergency Overflow Outfall
- Shore based Emergency Overflow
- Abandoned (A)



TORONTO



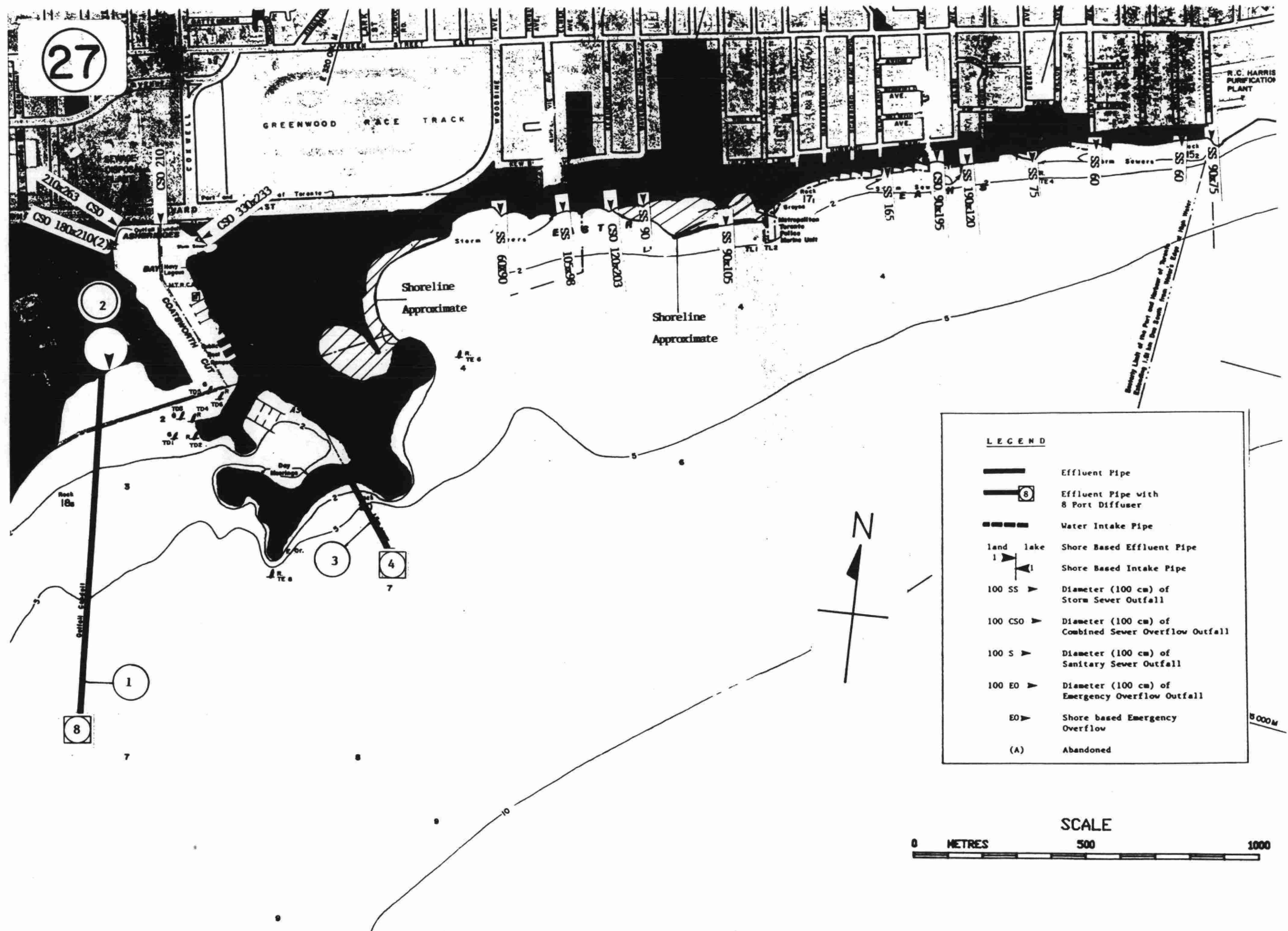
LEGEND

- Effluent Pipe
- (8) — Effluent Pipe with 8 Port Diffuser
- Water Intake Pipe
- land lake
- Shore Based Effluent Pipe
- Shore Based Intake Pipe
- 100 SS > Diameter (100 cm) of Storm Sewer Outfall
- 100 CSO > Diameter (100 cm) of Combined Sewer Overflow Outfall
- 100 S > Diameter (100 cm) of Sanitary Sewer Outfall
- 100 EO > Diameter (100 cm) of Emergency Overflow Outfall
- EO > Shore based Emergency Overflow
- (A) Abandoned

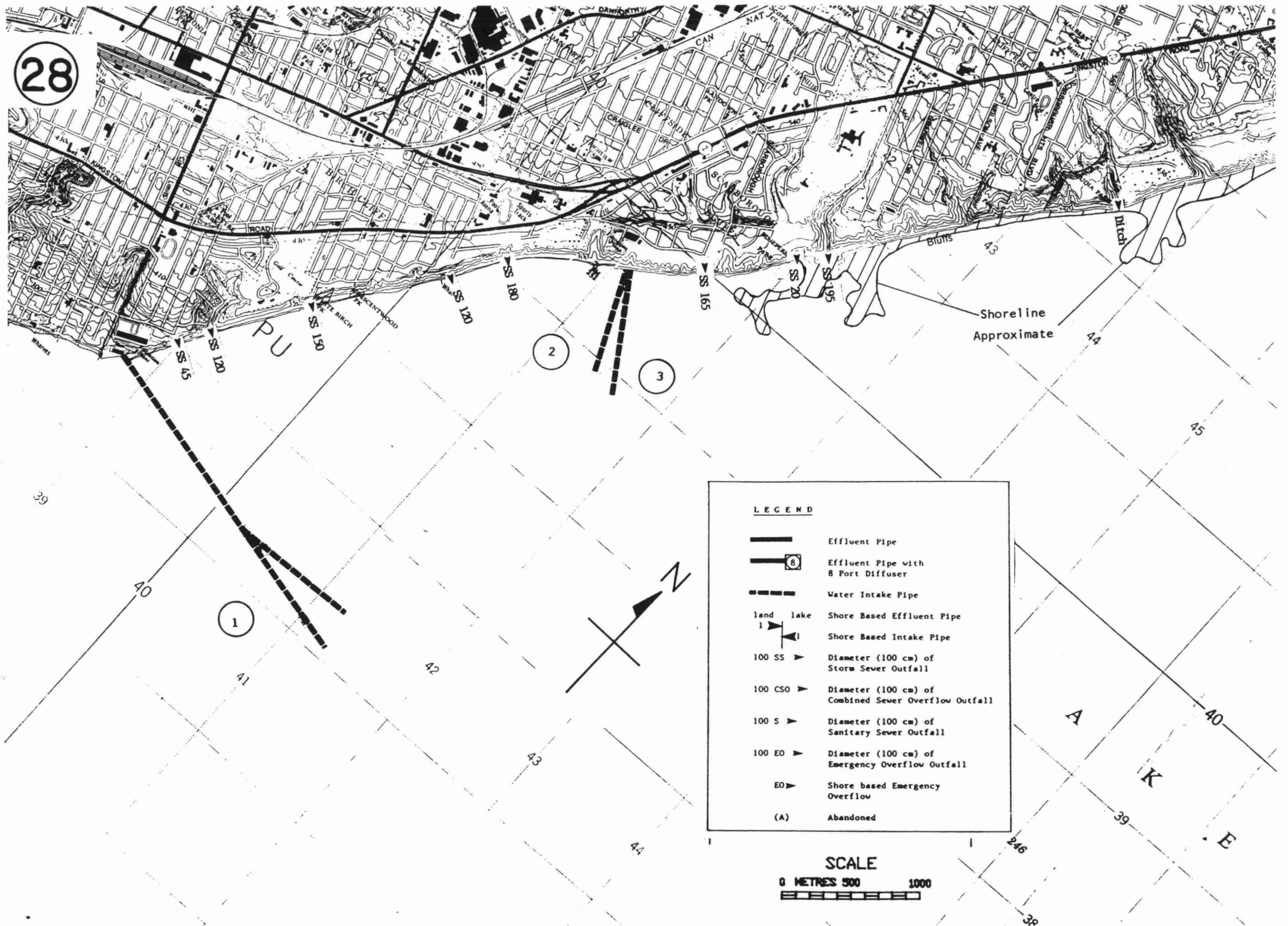
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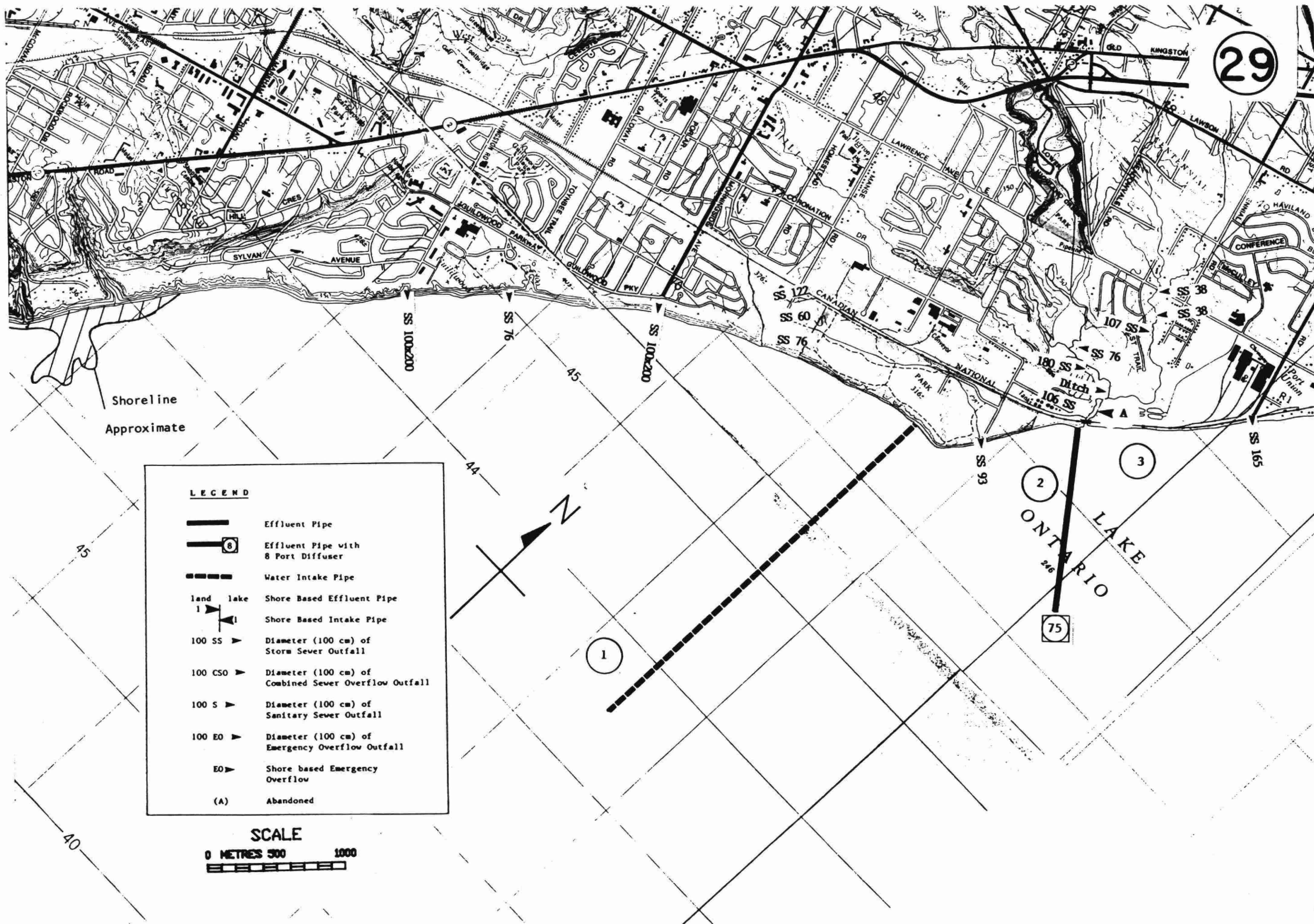
Name	Main STP	Main STP	Main STP				
Intake/Outfall	Outfall #1	Outfall #2	Outfall #3				
DMIS/IMIS No.	120000391	120000391	120000391				
Structure No.	1	2	3				
Map Number	27	27	27				
Operating Authority	Metro Toronto RM	Metro Toronto RM	Metro Toronto RM				
Location	Toronto	Toronto	Toronto				
Supplier/Receiver	Lake Ontario	Lake Ontario	Lake Ontario				
Point of Discharge	Offshore	Shore	Offshore				
Terminal Basin	Lake Ontario	Lake Ontario	Lake Ontario				
Activity	Municipal Sewage Treatment	Municipal Sewage Treatment	Municipal Sewage Treatment				
Process Type	Secondary Treatment	Secondary Treatment	Secondary Treatment				
Supply/Discharge Type	Continuous	Intermittent	Intermittent				
Treatment Type	Activated Sludge Aeration P Removal-Continuous Summer Chlorination from June to October	Activated Sludge Aeration P Removal-Continuous Summer Chlorination from June to October	Activated Sludge Aeration P Removal-Continuous Summer Chlorination from June to October				
Comments	Outfall study proposes a new longer and high capacity outfall	Emergency by pass Outfall	High Level Overflow Although active it has not been used in recent years				
Design Flow (1000m3/day)	1200.00	2040.00	NA				
Mean Annual Flow (1000m3/day)	864.00	864.00	NA				
Pipe length from shore (m)	1066.57	0.00	288.00				
Pipe Diameter (cm)	274.00	274.00	150.00				
Water Depth at end of pipe (m)	12.20	1.00	5.80				
Water depth above end of pipe (m)	11.60	1.00	2.30				
Diffuser	YES	NO	YES				
Number of ports	8		4				



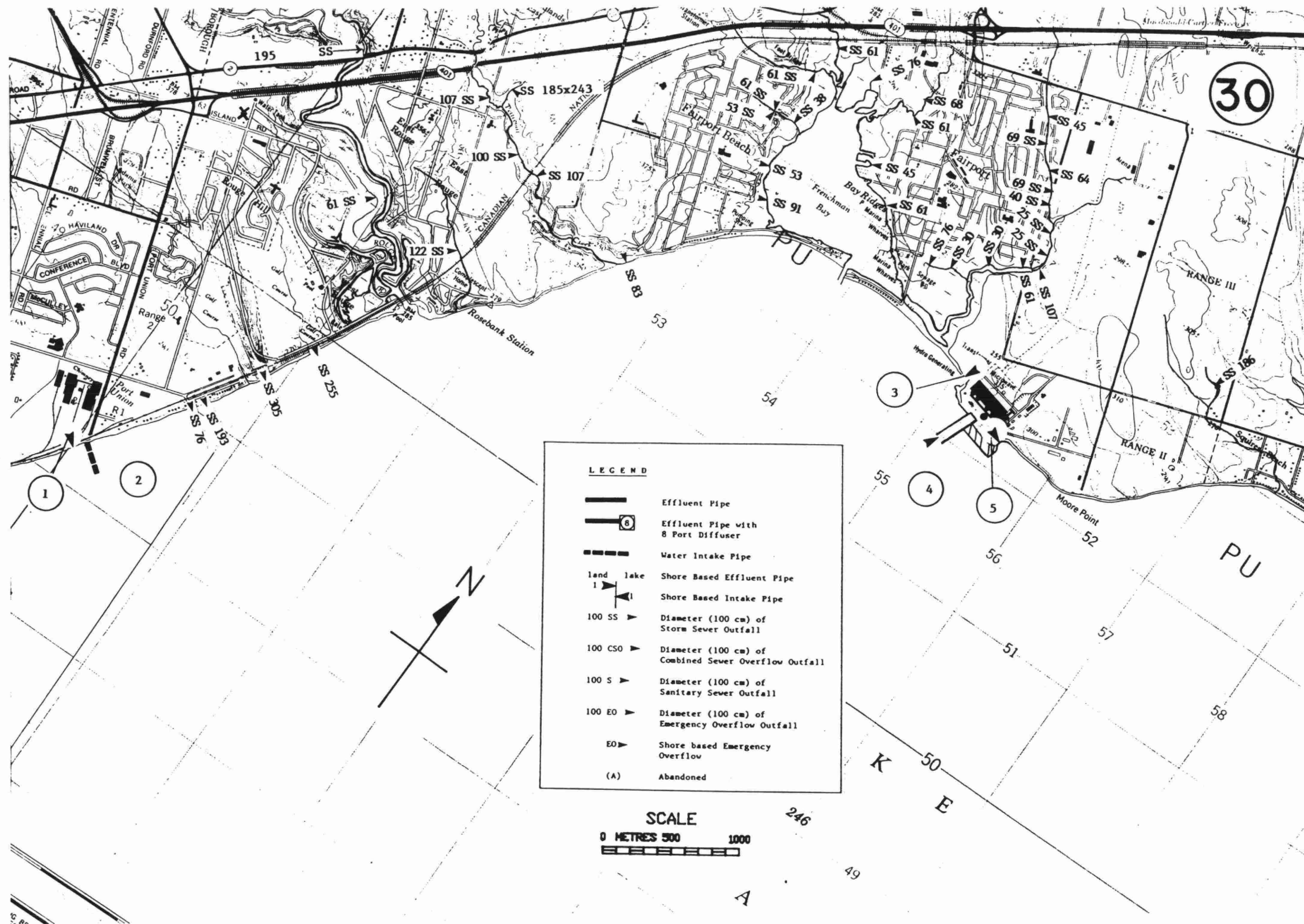
Name	R. C. Harris WTP	Scarborough Pump St.	Scarborough Pump St.				
Intake/Outfall	Intake	Intake #1	Intake #2				
UNIS/INIS No.	220002262	NA	NA				
Structure No.	1	2	3				
Map Number	28	28	28				
Operating Authority	Metro Toronto RM	Metro Toronto RM	Metro Toronto RM				
Location	Scarborough	Scarborough	Scarborough				
Supplier/Receiver	Lake Ontario	Lake Ontario	Lake Ontario				
Point of Discharge							
Terminal Basin	Lake Ontario	Lake Ontario	Lake Ontario				
Activity	Municipal Water Treatment	Formerly a Municipal Water Treatment Plant	Pumping Plant				
Process Type	Physical and Chemical Treatment	NA					
Supply/Discharge Type	Continuous	Continuous (when in use)	Continuous				
Treatment Type	Screening, Filtration Chlorination and Fluoridation	NA	Pumping				
Comments	"Y" shaped intake	Converted to Pump Station in 1977 Intake abandoned, West intake used as a drain	Converted to Pump Station in 1977 Intake abandoned.				
Design Flow (1000m3/day)	1000.00	90.00	90.00				
Mean Annual Flow (1000m3/day)	660.70	0.00	0.00				
Pipe length from shore (m)	2650.00	780.00	914.00				
Pipe Diameter (cm)	305.00	60.00	120.00				
Water Depth at end of pipe (m)	12.20	7.70	10.00				
Water depth above end of pipe (m)	NA	NA	NA				
Diffuser							
Number of ports							



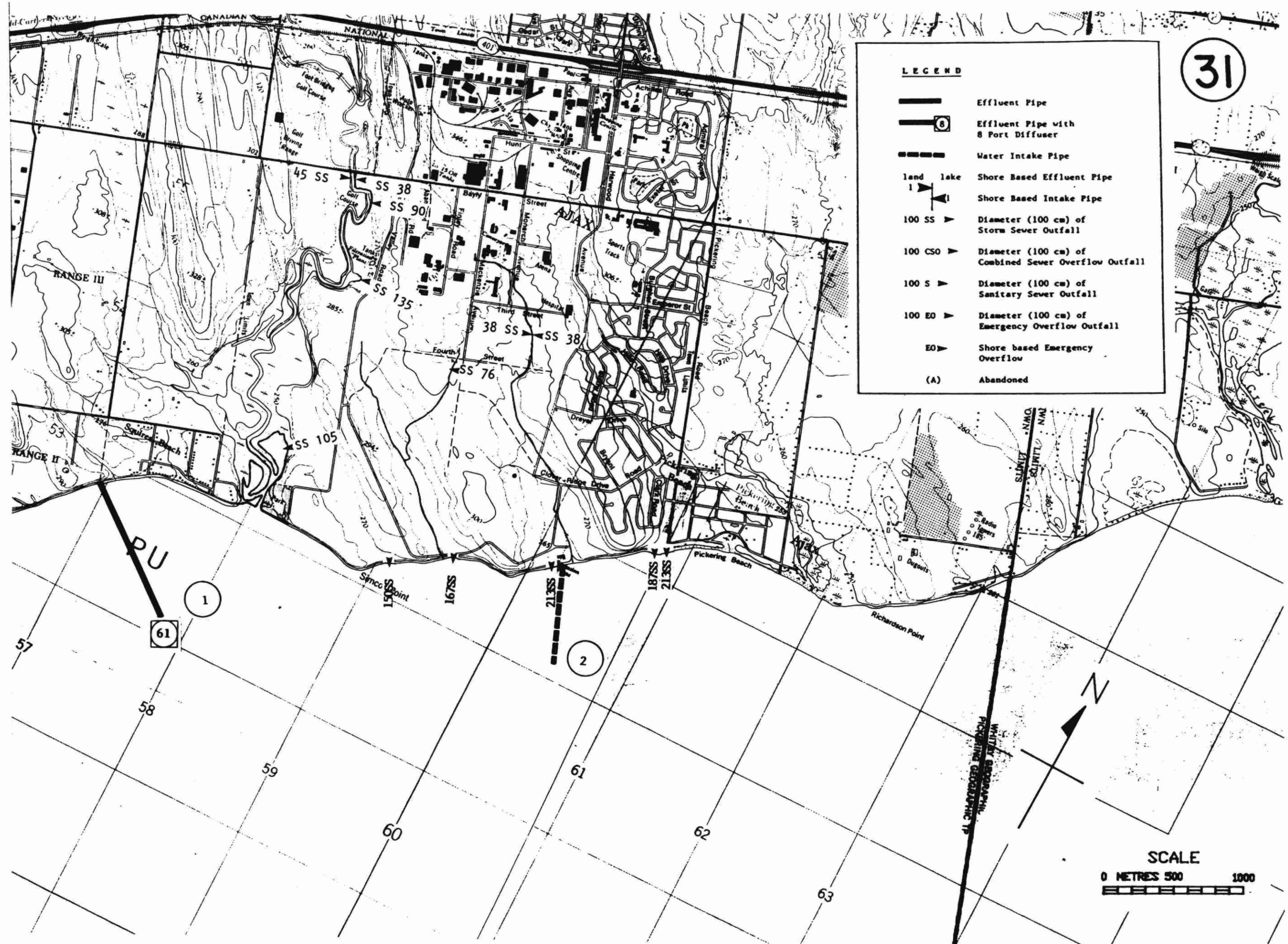
Name	Easterly Filtration Plant	Highland Creek STP	Manson Insulation				
Intake/Outfall	Intake	Outfall	Outfall				
UNIS/INIS No.	220004536	120000373	NA				
Structure No.	1	2	3				
Map Number	29	29	29				
Operating Authority	Metro Toronto RM	Metro Toronto RM	IND				
Location	Scarborough	Scarborough	Scarborough				
Supplier/Receiver	Lake Ontario	Lake Ontario	Highland Creek				
Point of Discharge		Offshore	River Mouth				
Terminal Basin	Lake Ontario	Lake Ontario	Lake Ontario				
Activity	Municipal Water Treatment	Municipal Sewage Treatment	Insulation Manufacturing				
Process Type	Physical and Chemical Treatment	Secondary Treatment	High temperature calcium silicate insulation				
Supply/Discharge Type	Continuous	Continuous	Continuous				
Treatment Type	Filtration, Chlorination Fluoridation	Activated Sludge P Removal-Continuous Summer Chlorination	Primary Settling Lagoons				
Comments			Process water being routed to municipal as of Mar.3 1987				
Design Flow (1000m3/day)	455.00	1037.00	NA				
Mean Annual Flow (1000m3/day)	273.20	172.80	0.09				
Pipe length from shore (m)	3210.00	1348.00	1.00				
Pipe Diameter (cm)	330.00	274.00	40.00				
Water Depth at end of pipe (m)	18.00	11.90	0.50				
Water depth above end of pipe (m)	NA	7.60	0.00				
Diffuser		YES	NO				
Number of ports		75					



Name	Manson Insulation	Manson Insulation	Pickering NGS	Pickering NGS	Pickering NGS		
Intake/Outfall	Outfall	Intake	Outfall	Intake	Outfall		
UMIS/IMIS No.	NA	NA	NA	NA	NA		
Structure No.	1	2	3	4	5		
Map Number	30	30	30	30	30		
Operating Authority	IND	IND	Ontario Hydro	Ontario Hydro	Ontario Hydro		
Location	Scarborough	Scarborough	Pickering	Pickering	Pickering		
Supplier/Receiver	Lake Ontario	Lake Ontario	Lake Ontario	Lake Ontario	Lake Ontario		
Point of Discharge	Shore		Shore		Shore		
Terminal Basin	Lake Ontario	Lake Ontario	Lake Ontario	Lake Ontario	Lake Ontario		
Activity	Insulation Manufacturing	Insulation Manufacturing	Electrical Generating Station	Electrical Generating Station	Electrical Generating Station		
Process Type	High temperature calcium silicate insulation	High temperature calcium silicate insulation	Nuclear Powered Generating Station Eight CANDU reactors	Nuclear Powered Generating Station Eight CANDU reactors	Nuclear Powered Generating Station Eight CANDU reactors		
Supply/Discharge Type	Periodic	Continuous	Continuous	Continuous	Continuous		
Treatment Type	No Treatment of stormwater runoff	Softners and chemicals	Bar Racks & Vertical Travelling Screens	Bar Racks & Vertical Travelling Screens	Bar Racks & Vertical Travelling Screens		
Comments	Stormwater will be routed to lake as of Mar. 31 Previously discharge to lagoon system	Water for process and boilers	Discharge Channel for once through non-contact cooling water	Intake Channel for once through non-contact cooling water	Discharge Channel for once through non-contact cooling water		
Design Flow (1000m3/day)	NA	NA	11405.00	23328.00	11923.00		
Mean Annual Flow (1000m3/day)	NA	0.31	9124.00	18662.00	9538.00		
Pipe length from shore (m)	2.00	240.00	0.00	300.00	0.00		
Pipe Diameter (cm)	76.00	76.00	NA	69.00	54.00		
Water Depth at end of pipe (m)	1.00	8.00	0.00	5.00	0.00		
Water depth above end of pipe (m)	0.00	6.00	0.00	NA	0.00		
Diffuser	NO		NO		NO		
Number of ports							



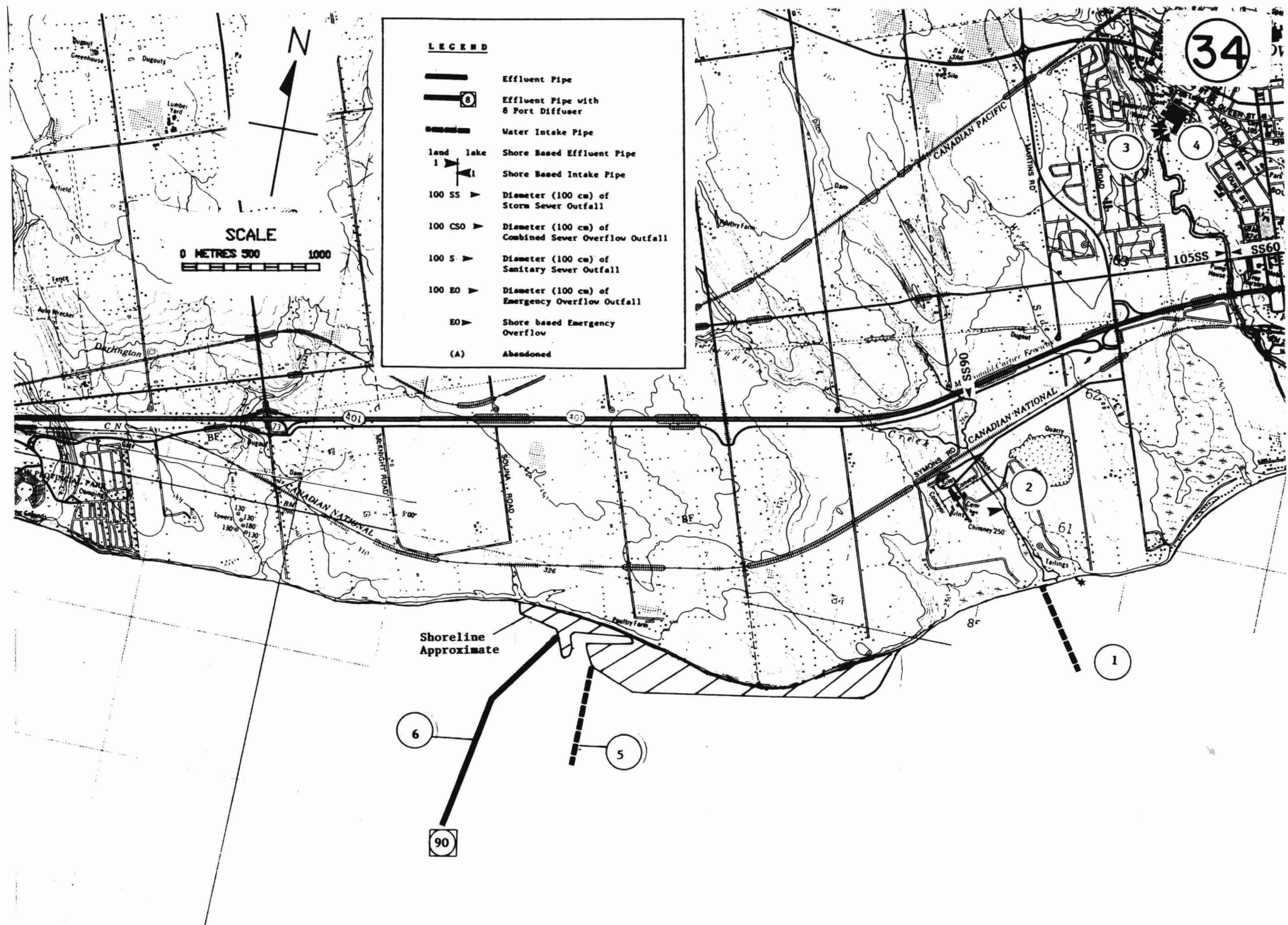
Name	Duffins Creek WPCP	Ajax WTP					
Intake/Outfall	Outfall	Intake					
UMIS/INIS No.	120001915	NA					
Structure No.	1	2					
Map Number	31	31					
Operating Authority	Durham RM	Durham RM					
Location	Pickering	Ajax					
Supplier/Receiver	Lake Ontario	Lake Ontario					
Point of Discharge	Offshore						
Terminal Basin	Lake Ontario	Lake Ontario					
Activity	Municipal Sewage Treatment	Municipal Water Treatment					
Process Type	Secondary Treatment	Physical Treatment					
Supply/Discharge Type	Continuous	Seasonal					
Treatment Type	Activated Sludge P Removal-Continuous	Direct Filtration					
Comments							
Design Flow (1000m3/day)	181.82	54.50					
Mean Annual Flow (1000m3/day)	140.00	NA					
Pipe length from shore (m)	1040.00	600.00					
Pipe Diameter (cm)	305.00	91.00					
Water Depth at end of pipe (m)	11.00	10.00					
Water depth above end of pipe (m)	9.30	9.10					
Diffuser	YES						
Number of ports	61						



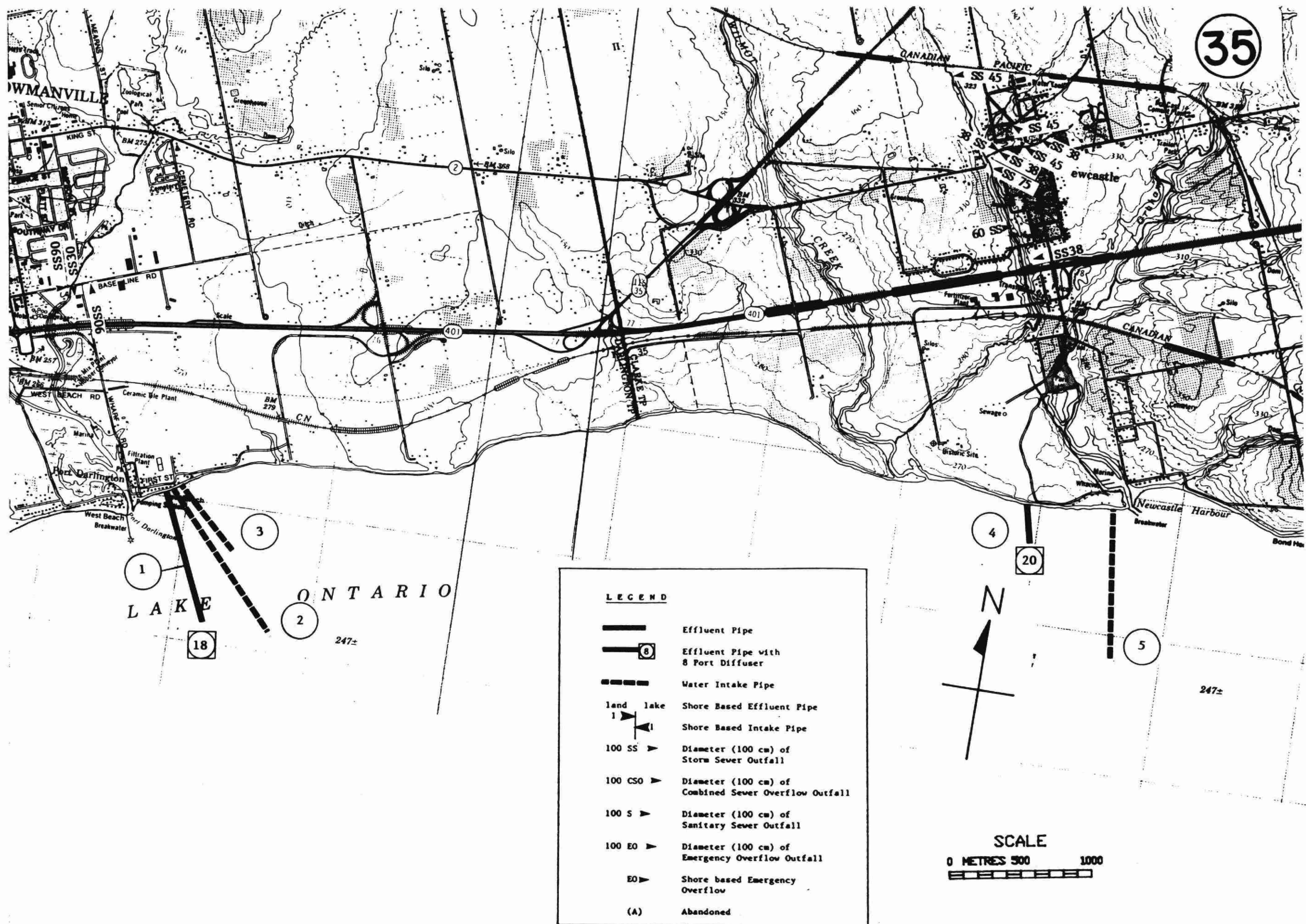
Name	Whitby WTP	Whitby WTP	Whitby WTP	Pringle Creek WPCP 1&2	LASCO	Corbett Creek WPCP	
Intake/Outfall	Intake	Intake	Intake	Outfall	Outfall	Outfall	
OMIS/IMIS No.	220000754	220000754	220000754	120000747	NA	120000738	
Structure No.	1	2	3	4	5	6	
Map Number	32	32	32	32	32	32	
Operating Authority	Durham RM	Durham RM	Durham RM	Durham RM	IND	Durham RM	
Location	Whitby	Whitby	Whitby	Whitby	Whitby	Whitby	
Supplier/Receiver	Lake Ontario	Lake Ontario	Lake Ontario	Pringle Creek	Lake Ontario	Lake Ontario	
Point of Discharge				River Mouth	Shore	Offshore	
Terminal Basin	Lake Ontario	Lake Ontario	Lake Ontario	Lake Ontario	Lake Ontario	Lake Ontario	
Activity	Municipal Water Treatment	Municipal Water Treatment	Municipal Water Treatment	Municipal Sewage Treatment	Steel Production	Municipal Sewage Treatment	
Process Type	Physical and Chemical Treatment	Physical and Chemical Treatment	Physical and Chemical Treatment	Secondary Treatment	Electric Arc Furnace, Steelmaking and rolling	Secondary Treatment	
Supply/Discharge Type	Seasonal	Seasonal	Seasonal	Continuous	Continuous	Continuous	
Treatment Type	Direct Filtration Chlorination and Fluoridation	Direct Filtration Chlorination and Fluoridation	Direct Filtration Chlorination and Fluoridation	Activated Sludge P Removal-Continuous	Chlorination & settling of Sanitary Flows Blow down from the closed Cooling system	Activated Sludge P Removal-Continuous	
Comments					The blow down is the major component of the discharge		
Design Flow (1000m3/day)	136.40	136.40	136.40	14.77	20.80	36.37	
Mean Annual Flow (1000m3/day)	NA	NA	NA	12.00	0.80	12.00	
Pipe length from shore (m)	425.00	700.00	1704.00	0.00	0.00	327.00	
Pipe Diameter (cm)	63.00	127.00	137.00	76.00	Open Ditch	183.00	
Water Depth at end of pipe (m)	7.60	10.00	17.00	0.45	0.00	4.00	
Water depth above end of pipe (m)	NA	NA	13.00	0.30	0.00	3.00	
Diffuser				NO	NO	YES	
Number of ports						3	

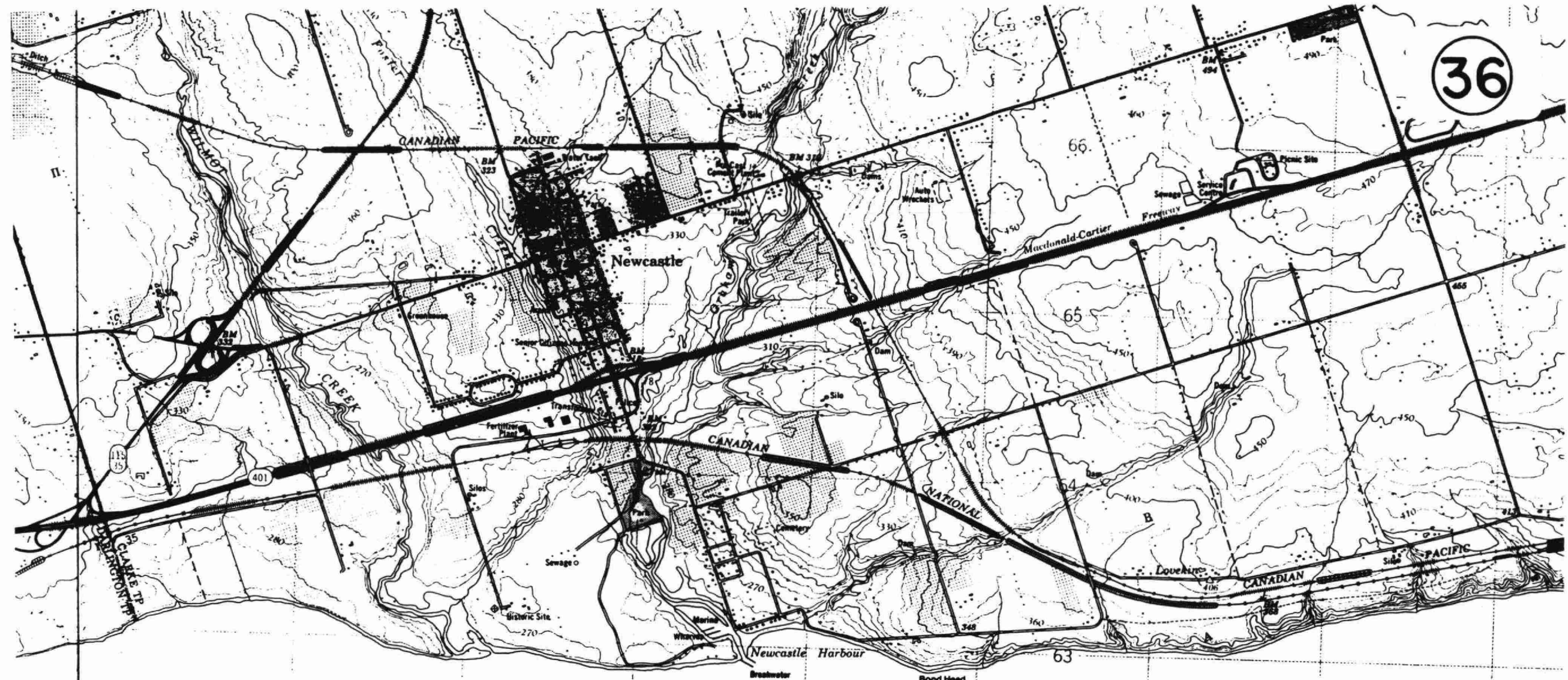
Name	Oshawa WTP	Oshawa WTP	Harmony Creek WPCP 1&2	General Motors of Canada		
Intake/Outfall	Intake #1	Intake #2	Outfall	Outfalls		
UMIS/IMIS No.	220001637	220001637	120000774	NA		
Structure No.	1	2	3	4		
Map Number	33	33	33	33		
Operating Authority	Durham RM	Durham RM	Durham RM	IND		
Location	Oshawa	Oshawa	Oshawa	Oshawa		
Supplier/Receiver	Lake Ontario	Lake Ontario	Lake Ontario	Creek		
Point of Discharge			Shore	River Mouth		
Terminal Basin	Lake Ontario	Lake Ontario	Lake Ontario	Lake Ontario		
Activity	Municipal Water Treatment	Municipal Water Treatment	Municipal Sewage Treatment	Automobile Assembly Plant		
Process Type	Physical and Chemical Treatment	Physical and Chemical Treatment	Secondary Treatment	NA		
Supply/Discharge Type	NA	Continuous	Continuous	Intermittent		
Treatment Type	Conventional Filtration Chlorination and Fluoridation	Conventional Filtration Chlorination and Fluoridation	Activated Sludge Trickling Filter P Removal-Continuous	None		
Comments				Rainfall and Snowmelt Runoff Only		
Design Flow (1000m3/day)	136.40	136.40	68.20	NA		
Mean Annual Flow (1000m3/day)	100.00	100.00	54.00	NA		
Pipe length from shore (m)	791.00	853.00	0.00	0.00		
Pipe Diameter (cm)	76.00	91.00	182.00	Open Ditch		
Water Depth at end of pipe (m)	10.00	11.90	1.20	0.00		
Water depth above end of pipe (m)	NA	10.00	0.00	0.00		
Diffuser			NO	NO		
Number of ports						

Name	St. Marys Cement Co.	St. Marys Cement Co.	Goodyear Canada	Goodyear Canada	Darlington NGS	Darlington NGS
Intake/Outfall	Outfall	Intake	Intake	Outfalls	Intake	Outfall
UMIS/INIS No.	NA	NA	NA	NA	NA	NA
Structure No.	1	2	3	4	5	6
Map Number	34	34	34	34	34	34
Operating Authority	IND	IND	IND	IND	Ontario Hyrdo	Ontario Hydro
Location	Bowmanville	Bowmanville	Bowmanville	Bowmanville	Durham RM	Durham RM
Supplier/Receiver	Lake Ontario	Lake Ontario	Barbours Creek	Barbours Creek	Lake Ontario	Lake Ontario
Point of Discharge	River Mouth			River Mouth		Offshore
Terminal Basin	Lake Ontario	Lake Ontario	Lake Ontario	Lake Ontario	Lake Ontario	Lake Ontario
Activity	Manufacturing of Construction Products	Manufacturing of Construction Products	Manufacture of industrial rubber products	Manufacture of industrial rubber products	Electricity Generating Station	Electricity Generating Station
Process Type	Cement, Portland and Crushed Stone	Cement, Portland and Crushed Stone	Production of Conveyor Belts	Production of Conveyor Belts	Four CANDU Nuclear Reactors	Four CANDU Nuclear Reactors
Supply/Discharge Type	Continuous	Continuous	Continuous	Continuous	Continuous	Continuous
Treatment Type	None	Chlorination	No Treatment	No Treatment	Bar Racks and Screens	Bar Racks and Screens
Comments	Cooling Water Return	Small quantity of water diverted for potable use	Cooling water only	Total of 9 outfalls for cooling water discharge. Pipe diameters range from 15 to 20 cm	Plant Operational and On Stream In 1992. Cooling Water Intake Only	Plant Operational and On Stream In 1992. Cooling Water Discharge Only
Design Flow (1000m3/day)	2.00	7.60	7.80	7.80	13392.00	13392.00
Mean Annual Flow (1000m3/day)	0.70	1.60	1.90	1.90	10714.00	10714.00
Pipe length from shore (m)	0.00	670.00	0.00	0.00	710.00	708.00
Pipe Diameter (cm)	NA	61.00	40.64	20.00	796.00	1623.00
Water Depth at end of pipe (m)	0.00	10.00	2.00	0.00	10.70	12.00
Water depth above end of pipe (m)	0.00	8.00	1.50		13.70	NA
Diffuser	NO					YES
Number of ports						90

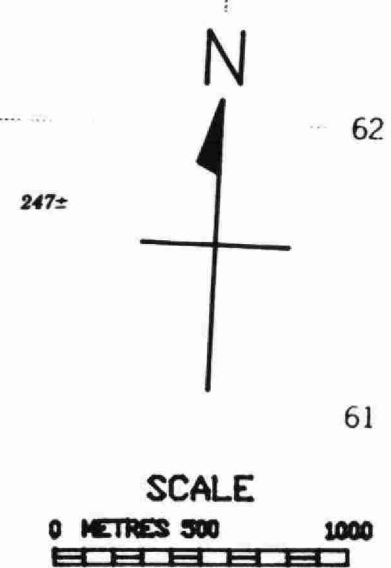


Name	Port Darlington WPCP	Bowmanville WTP #1	Bowmanville WTP #2	Graham Creek WPCP	Newcastle WTP		
Intake/Outfall	Outfall	Intake	Intake	Outfall	Intake		
UNIS/INIS No.	120003076	220000861	220000861	110001569	NA		
Structure No.	1	2	3	4	5		
Map Number	35	35	35	35	35		
Operating Authority	Durham RM	Durham RM	Durham RM	Durham RM	Durham RM		
Location	Port Darlington	Bowmanville	Bowmanville	Newcastle	Newcastle		
Supplier/Receiver	Lake Ontario	Lake Ontario	Lake Ontario	Lake Ontario	Lake Ontario		
Point of Discharge	Offshore			Offshore			
Terminal Basin	Lake Ontario	Lake Ontario	Lake Ontario	Lake Ontario	Lake Ontario		
Activity	Municipal Sewage Treatment	Municipal Water Treatment	Municipal Water Treatment	Municipal Sewage Treatment	Municipal Water Treatment		
Process Type	Secondary Treatment	Physical and Chemical Treatment	Physical and Chemical Treatment	Secondary Treatment	Physical Treatment		
Supply/Discharge Type	Continuous	Continuous	Continuous	Continuous	Continuous		
Treatment Type	Activated Sludge P Removal-Continuous	Direct Filtration Chlorination	Direct Filtration Chlorination	Activated Sludge Extended Aeration	Direct Filtration		
Comments							
Design Flow (1000m3/day)	4.55	19.80	4.90	1.80	8.20		
Mean Annual Flow (1000m3/day)	5.75	10.00	NA	0.90	1.00		
Pipe length from shore (m)	984.00	1229.00	523.00	255.00	1029.00		
Pipe Diameter (cm)	122.00	107.00	60.00	61.00	61.00		
Water Depth at end of pipe (m)	7.00	12.40	NA	3.00	10.00		
Water depth above end of pipe (m)	NA	NA	NA	2.80	9.40		
Diffuser	YES			YES			
Number of ports	18			20			

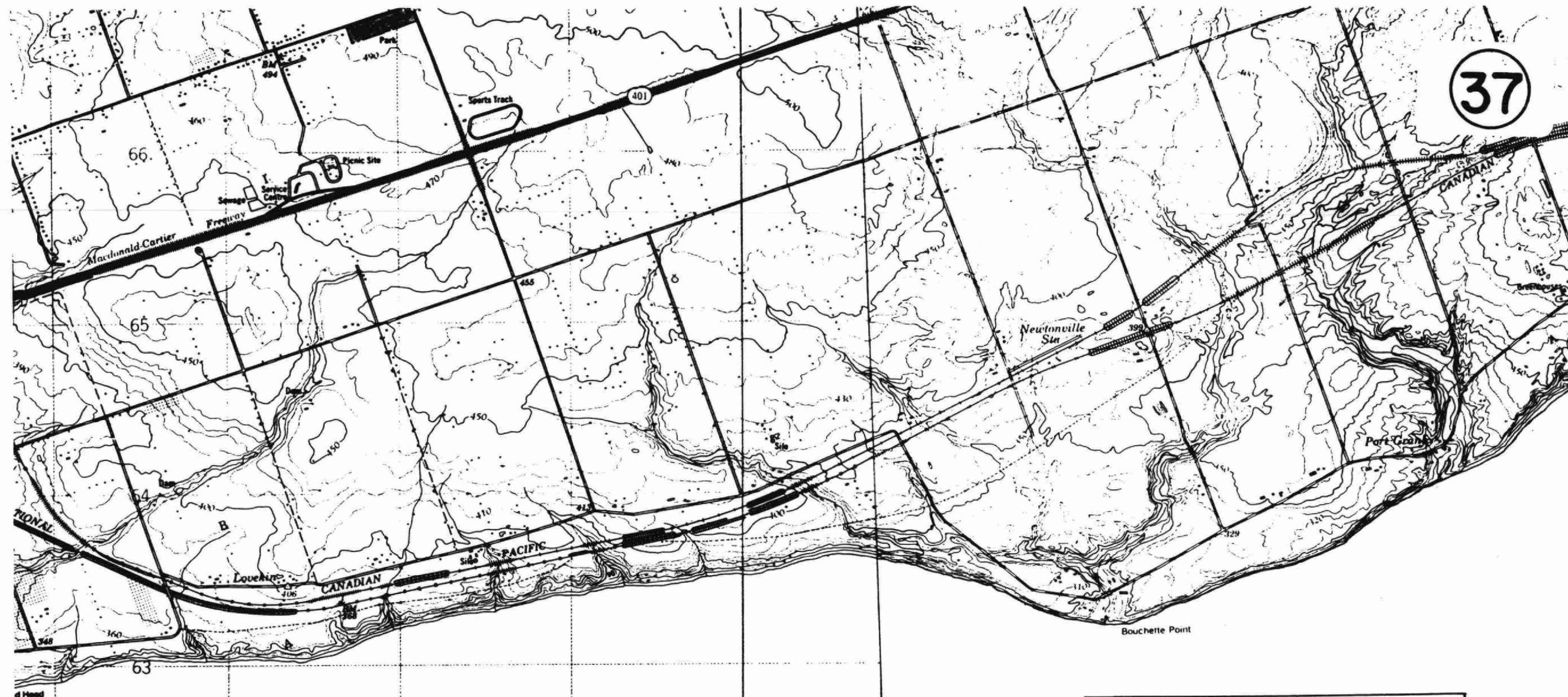




L A K E



LEGEND	
	Effluent Pipe
	Effluent Pipe with 8 Port Diffuser
	Water Intake Pipe
	Shore Based Effluent Pipe
	Shore Based Intake Pipe
100 SS >	Diameter (100 cm) of Storm Sewer Outfall
100 CSO >	Diameter (100 cm) of Combined Sewer Overflow Outfall
100 S >	Diameter (100 cm) of Sanitary Sewer Outfall
100 EO >	Diameter (100 cm) of Emergency Overflow Outfall
EO >	Shore based Emergency Overflow
(A)	Abandoned

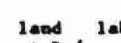
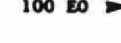
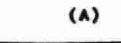


ONTARIO



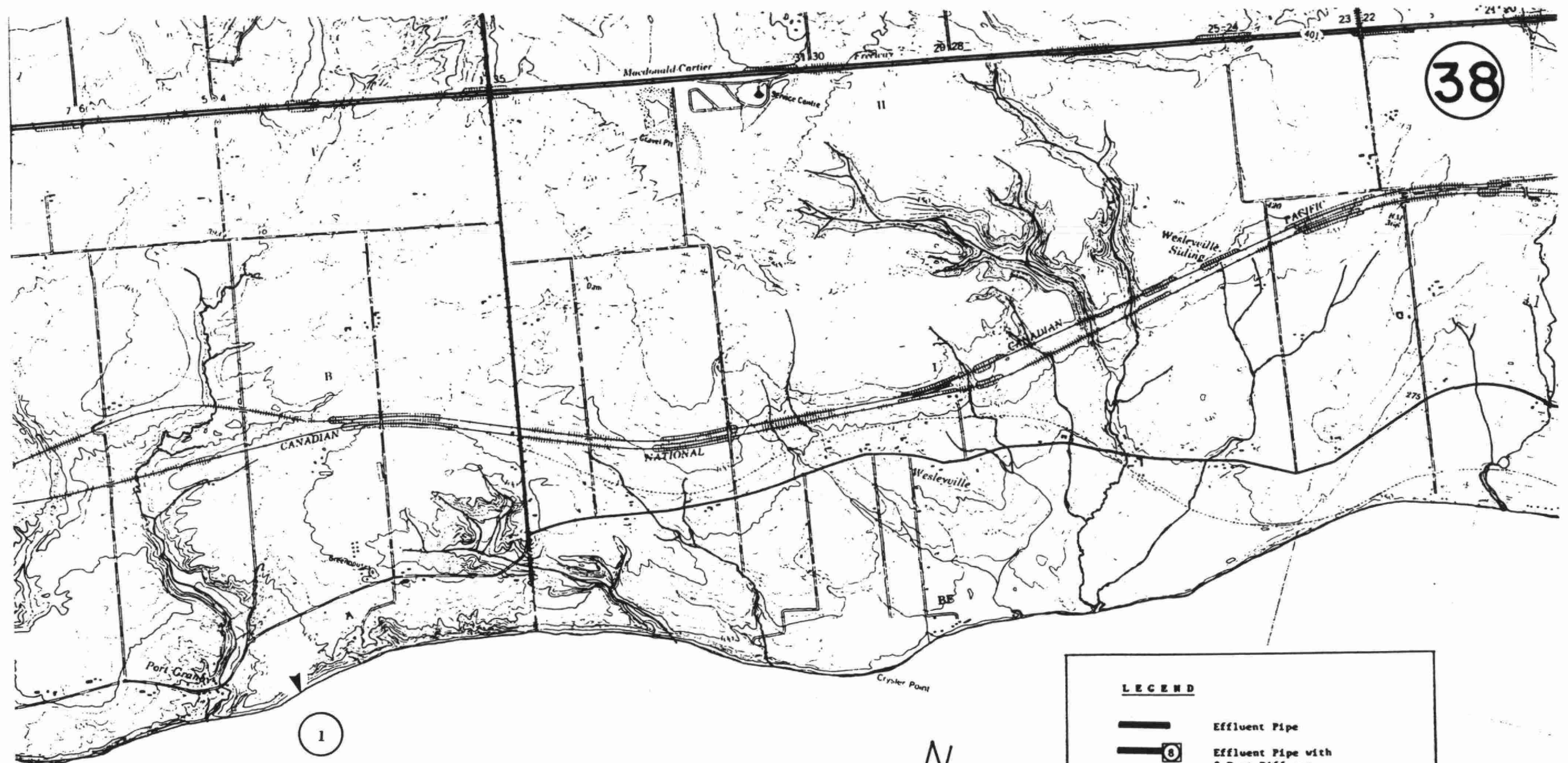
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LEGEND

-  Effluent Pipe
-  Effluent Pipe with 8 Port Diffuser
-  Water Intake Pipe
-  land lake Shore Based Effluent Pipe
-  Shore Based Intake Pipe
-  100 SS > Diameter (100 cm) of Storm Sewer Outfall
-  100 CSO > Diameter (100 cm) of Combined Sewer Overflow Outfall
-  100 S > Diameter (100 cm) of Sanitary Sewer Outfall
-  100 EO > Diameter (100 cm) of Emergency Overflow Outfall
-  EO > Shore based Emergency Overflow
-  (A) Abandoned

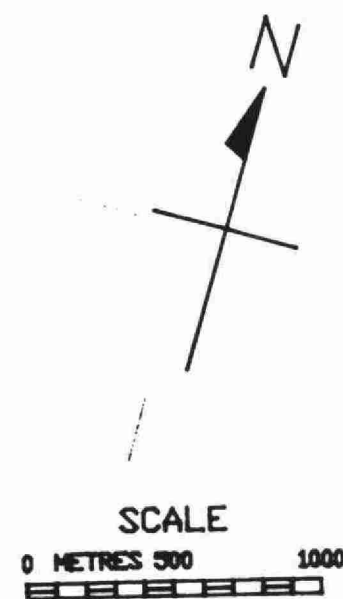
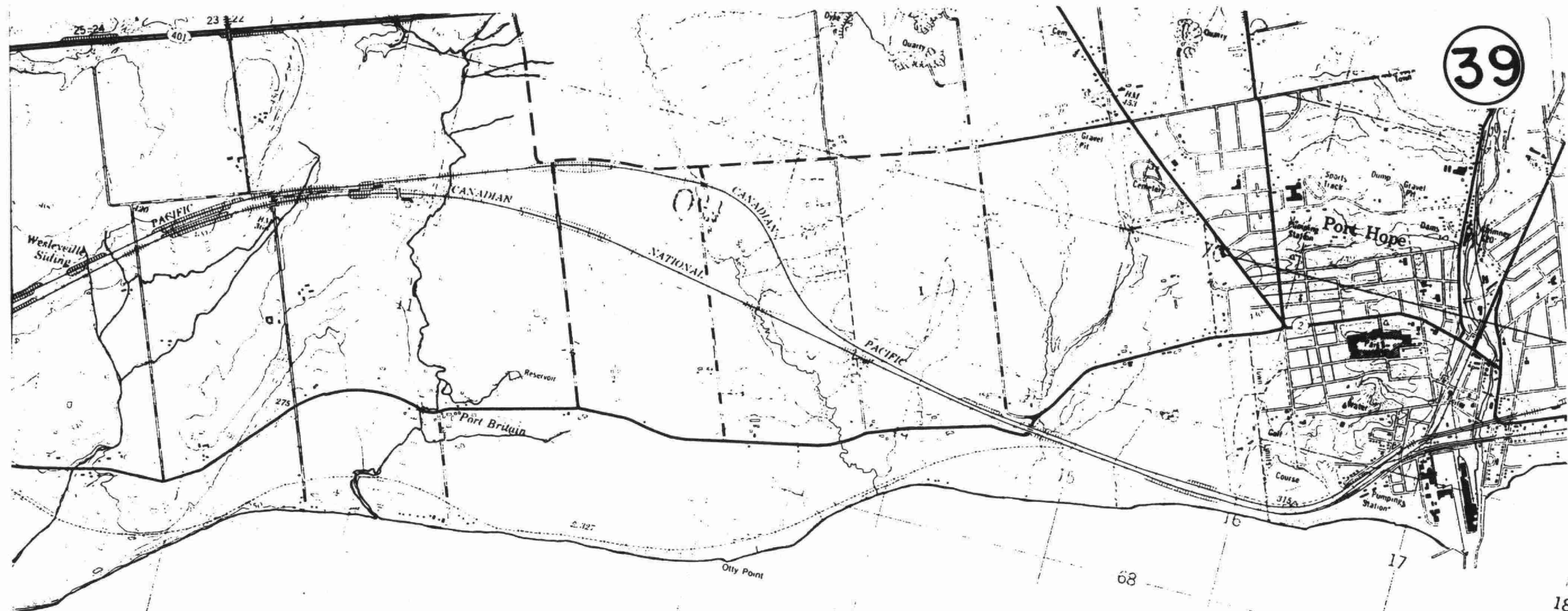
A K E

Name	Eldorado Resource Ltd.					
Intake/Outfall	Outfall					
UNIS/INIS No.	0000820209					
Structure No.	1					
Map Number	38					
Operating Authority	IND					
Location	Newcastle					
Supplier/Receiver	Lake Ontario					
Point of Discharge	Shore					
Terminal Basin	Lake Ontario					
Activity	Active Low-Level Radio-Active Waste Management Site					
Process Type	Shallow in Ground Burial					
Supply/Discharge Type	Continuous					
Treatment Type	FeCl3 added to Remove As, Ra-226 and Solids HCL for pH adjustment					
Comments						
Design Flow (1000m3/day)	0.30					
Mean Annual Flow (1000m3/day)	0.04					
Pipe length from shore (m)	0.00					
Pipe Diameter (cm)	60.00					
Water Depth at end of pipe (m)	NA					
Water depth above end of pipe (m)	NA					
Diffuser	NO					
Number of ports						



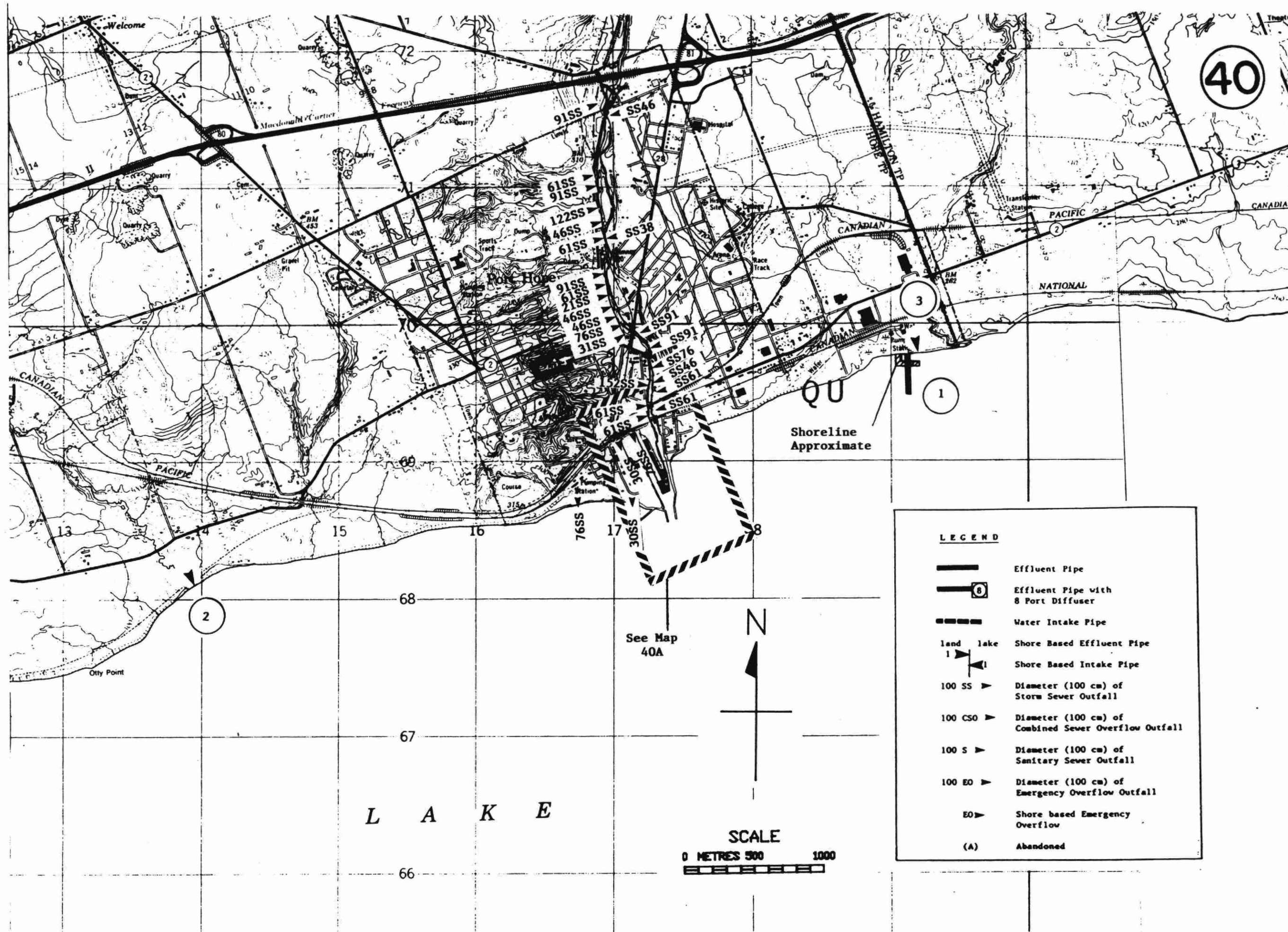
LEGEND

- Effluent Pipe
- Effluent Pipe with 8 Port Diffuser
- Water Intake Pipe
- land lake Shore Based Effluent Pipe
- Shore Based Intake Pipe
- 100 SS Diameter (100 cm) of Storm Sever Outfall
- 100 CSO Diameter (100 cm) of Combined Sever Overflow Outfall
- 100 S Diameter (100 cm) of Sanitary Sever Outfall
- 100 EO Diameter (100 cm) of Emergency Overflow Outfall
- EO Shore based Emergency Overflow
- (A) Abandoned

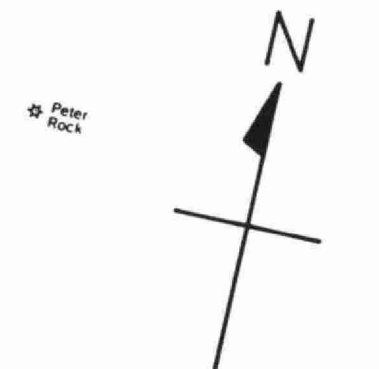


LEGEND	
	Effluent Pipe
	Effluent Pipe with 8 Port Diffuser
	Water Intake Pipe
	Shore Based Effluent Pipe
	Shore Based Intake Pipe
100 SS >	Diameter (100 cm) of Storm Sewer Outfall
100 CSO >	Diameter (100 cm) of Combined Sewer Overflow Outfall
100 S >	Diameter (100 cm) of Sanitary Sewer Outfall
100 EO >	Diameter (100 cm) of Emergency Overflow Outfall
EO >	Shore based Emergency Overflow
(A)	Abandoned

Name	Port Hope WPCP	Eldorado Resource Ltd.	Port Hope WPCP				
Intake/Outfall	Outfall	Outfall	Outfall				
DMIS/INIS No.	120000079	0000820100	120000079				
Structure No.	1	2	3				
Map Number	40	40	40				
Operating Authority	MUN	IND	MUN				
Location	Port Hope	Hope TWP	Port Hope				
Supplier/Receiver	Lake Ontario	Lake Ontario	Lake Ontario				
Point of Discharge	Offshore	Shore	Shore				
Terminal Basin	Lake Ontario	Lake Ontario	Lake Ontario				
Activity	Municipal Sewage Treatment	Inactive Waste Management Site	Municipal Sewage Treatment				
Process Type	Secondary Treatment	Chemical Treatment	Secondary Treatment				
Supply/Discharge Type	Continuous	Continuous	Continuous				
Treatment Type	Activated Sludge High Rate P Removal-Continuous	Leachate is Collected and Treated with FeCl3 to Remove As, Ba-226 and Solids	Activated Sludge High Rate P Removal-Continuous				
Comments							
Design Flow (1000m3/day)	9.02	0.50	9.02				
Mean Annual Flow (1000m3/day)	7.60	92.00	7.60				
Pipe length from shore (m)	291.00	3.00	0.00				
Pipe Diameter (cm)	60.96	75.00	90.00				
Water Depth at end of pipe (m)	NA	0.50	NA				
Water depth above end of pipe (m)	NA	0.50	NA				
Diffuser	NO	NO	NO				
Number of ports							



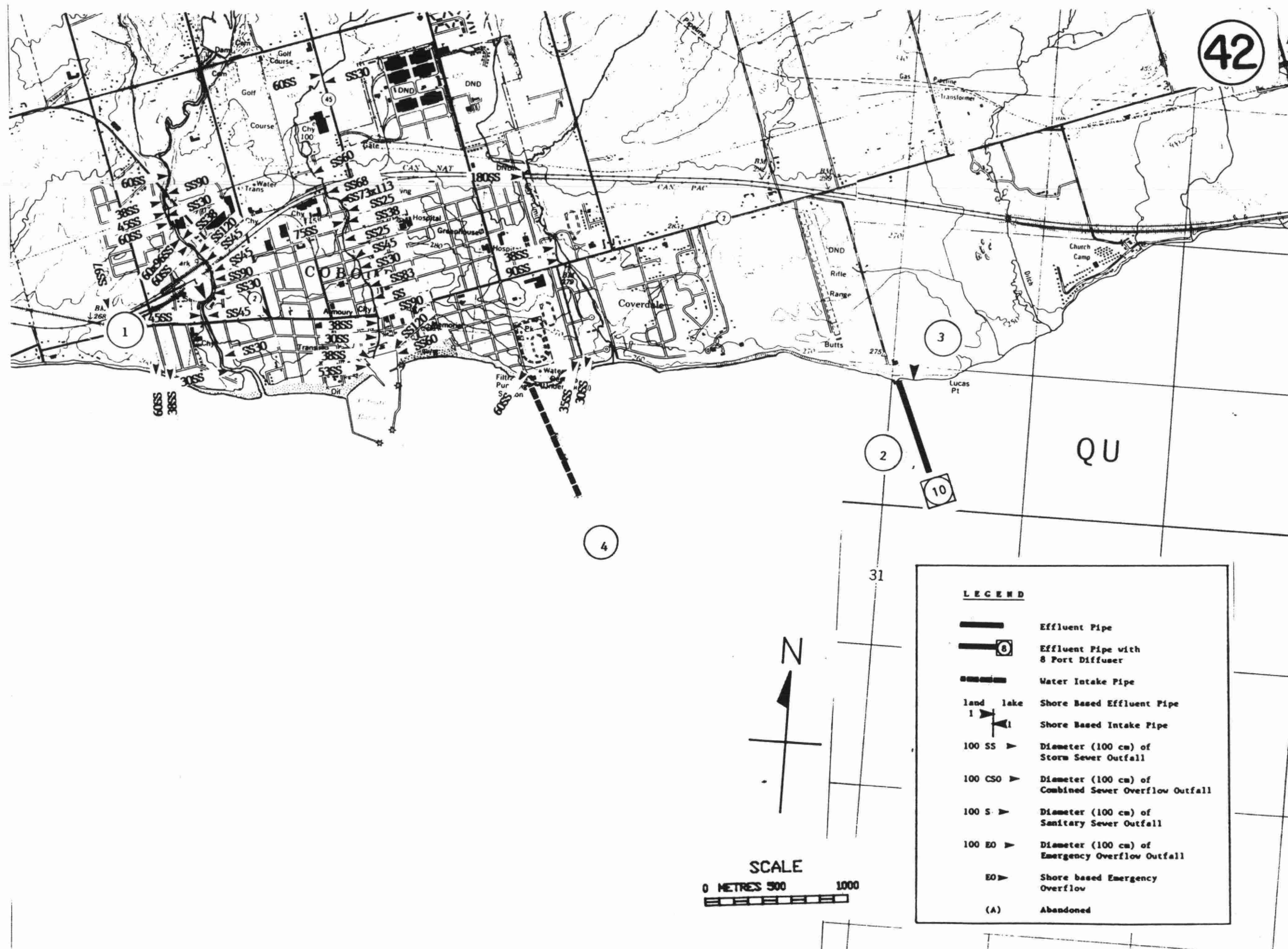
Name	Eldorado Resource Ltd.	Eldorado Resource Ltd.	Eldorado Resource Ltd.	Port Hope WTP	Port Hope WTP		
Intake/Outfall	Outfall	Outfall	Intake	Intake	Intake		
UNIS/INIS No.	0000820001	0000820001	0000820001	22000816	22000816		
Structure No.	1	2	3	4	5		
Map Number	40A	40A	40A	40A	40A		
Operating Authority	IND	IND	IND	MUN	MUN		
Location	Port Hope	Port Hope	Port Hope	Port Hope	Port Hope		
Supplier/Receiver	Ganaraska River	Ganaraska River	Ganaraska River	Lake Ontario	Lake Ontario		
Point of Discharge	Harbour	Harbour					
Terminal Basin	Lake Ontario	Lake Ontario	Lake Ontario	Lake Ontario	Lake Ontario		
Activity	Nuclear fuel/materials facility	Nuclear fuel/materials facility	Nuclear fuel/materials facility	Municipal Water Treatment	Municipal Water Treatment		
Process Type	Uranium (UF6) Conversion Facility, UO2 recycle unit	Uranium (UF6) Conversion Facility, UO2 recycle unit	Uranium (UF6) Conversion Facility, UO2 recycle unit	Physical and Chemical Treatment	Physical and Chemical Treatment		
Supply/Discharge Type	Continuous	Continuous	Continuous	Continuous	Continuous		
Treatment Type	None	None	Filters and Strainers	Filtration Chlorination	Filtration Chlorination		
Comments	Once through Cooling Water Only	This Plant has been shutdown since 1985 Some Cooling Required	Future Design Flow 27 m3/dayx1000				
Design Flow (1000m3/day)	20.00	5.50	22.00	20.10	20.10		
Mean Annual Flow (1000m3/day)	16.00	4.00	21.00	NA	NA		
Pipe length from shore (m)	NA	NA	NA	750.00	425.00		
Pipe Diameter (cm)	NA	61.00	107.00	NA	NA		
Water Depth at end of pipe (m)	NA	4.00	4.30	NA	NA		
Water depth above end of pipe (m)	NA	1.00	2.50	NA	NA		
Diffuser	NO	NO					
Number of ports							

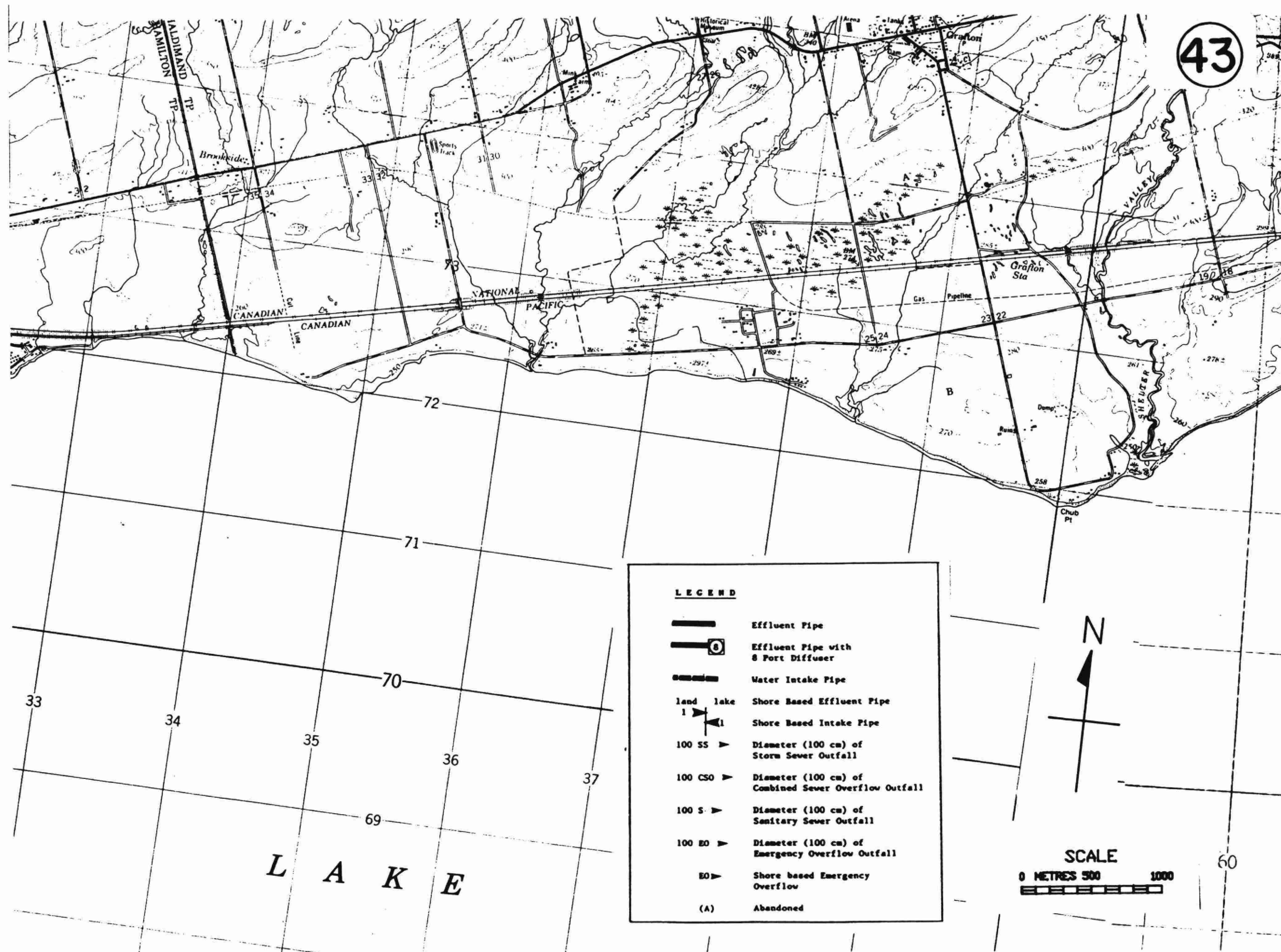


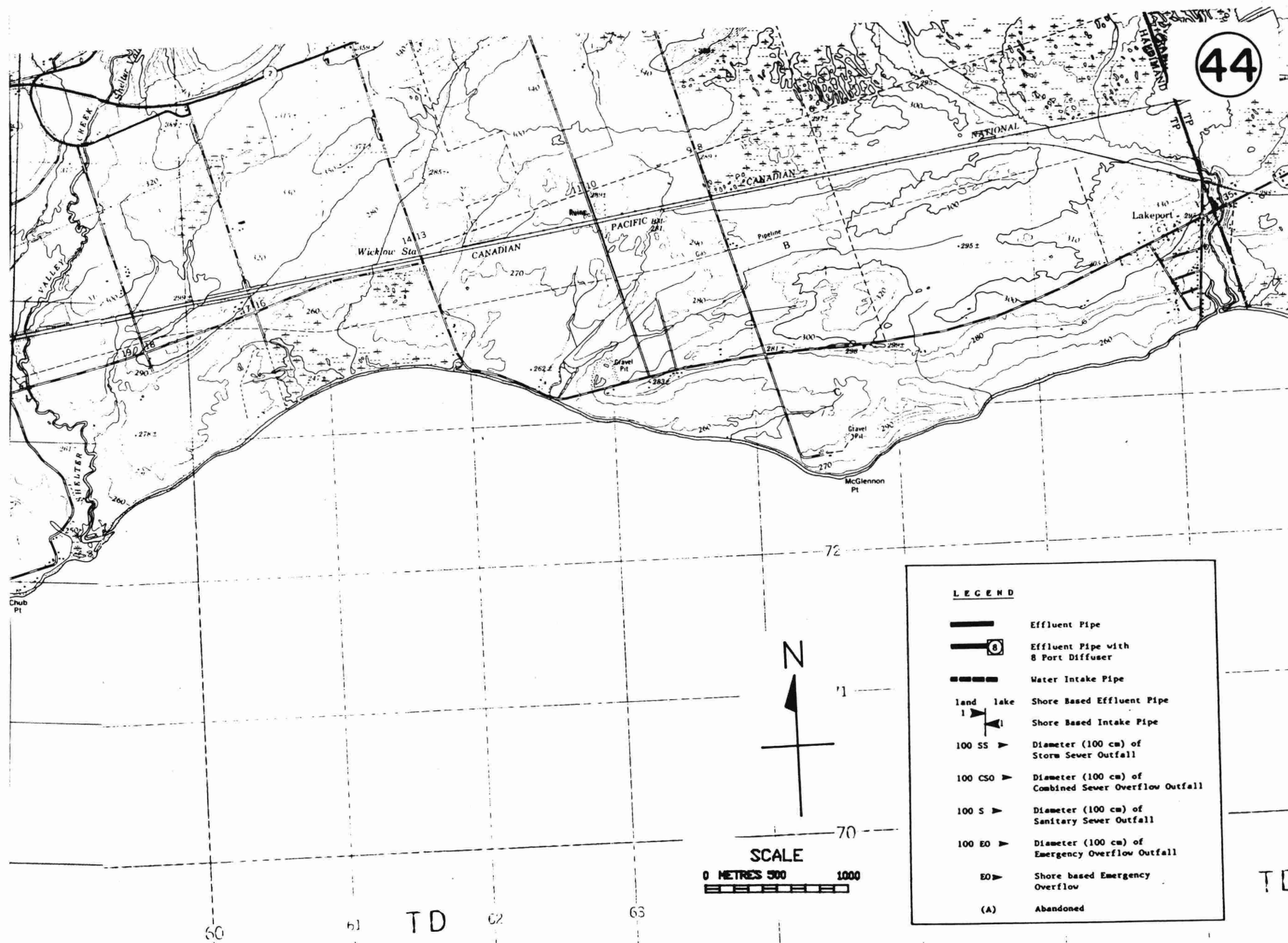
LEGEND

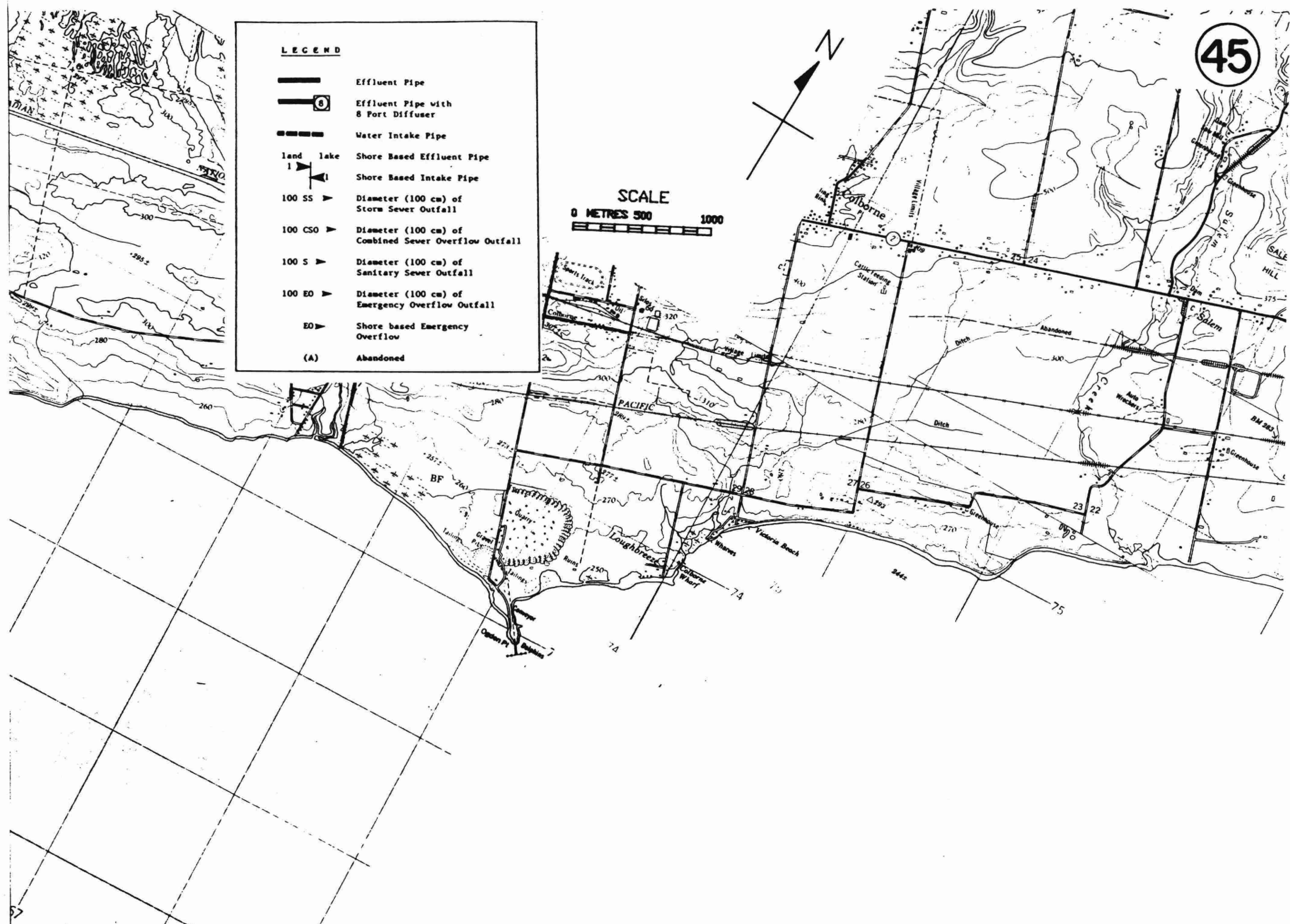
-  Effluent Pipe
-  Effluent Pipe with 8 Port Diffuser
-  Water Intake Pipe
-  land lake Shore Based Effluent Pipe
-  Shore Based Intake Pipe
-  100 SS > Diameter (100 cm) of Storm Sewer Outfall
-  100 CSO > Diameter (100 cm) of Combined Sewer Overflow Outfall
-  100 S > Diameter (100 cm) of Sanitary Sewer Outfall
-  100 EO > Diameter (100 cm) of Emergency Overflow Outfall
-  EO > Shore based Emergency Overflow
-  (A) Abandoned

Name	Cobourg STP #1	Cobourg STP #2	Borg-Warner Chemicals	Cobourg WTP			
Intake/Outfall	Outfall	Outfall	Outfall	Intake			
UNIS/INIS No.	120000097	120003192	0000600007	220000825			
Structure No.	1	2	3	4			
Map Number	42	42	42	42			
Operating Authority	MUN	MUN	IND	MUN PUC			
Location	Cobourg	Cobourg	Cobourg	Cobourg			
Supplier/Receiver	Cobourg Brook	Lake Ontario	Lake Ontario	Lake Ontario			
Point of Discharge	River Mouth	Offshore	Shore				
Terminal Basin	Lake Ontario	Lake Ontario	Lake Ontario	Lake Ontario			
Activity	Municipal Sewage Treatment	Municipal Sewage Treatment	Plastics Manufacturing	Municipal Water Treatment			
Process Type	Secondary Treatment	Secondary Treatment	Chemical reaction to produce ABS plastics	Physical and Chemical Treatment			
Supply/Discharge Type	Continuous	Continuous	Continuous	Continuous			
Treatment Type	Activated Sludge High Rate No P Removal Facilities	Activated Sludge P Removal-Continuous	Neutralization Solids Removal Aeration	Filtration, Clarifier with Alum and Chlorinated			
Comments							
Design Flow (1000m3/day)	16.05	5.86	2.27	43.29			
Mean Annual Flow (1000m3/day)	8.80	3.40	1.90	NA			
Pipe length from shore (m)	0.00	581.00	45.70	853.00			
Pipe Diameter (cm)	91.00	120.00	20.32	107.00			
Water Depth at end of pipe (m)	0.20	7.50	6.10	12.00			
Water depth above end of pipe (m)	0.00	5.50	5.80	11.00			
Diffuser	NO	YES	NO				
Number of ports		10					





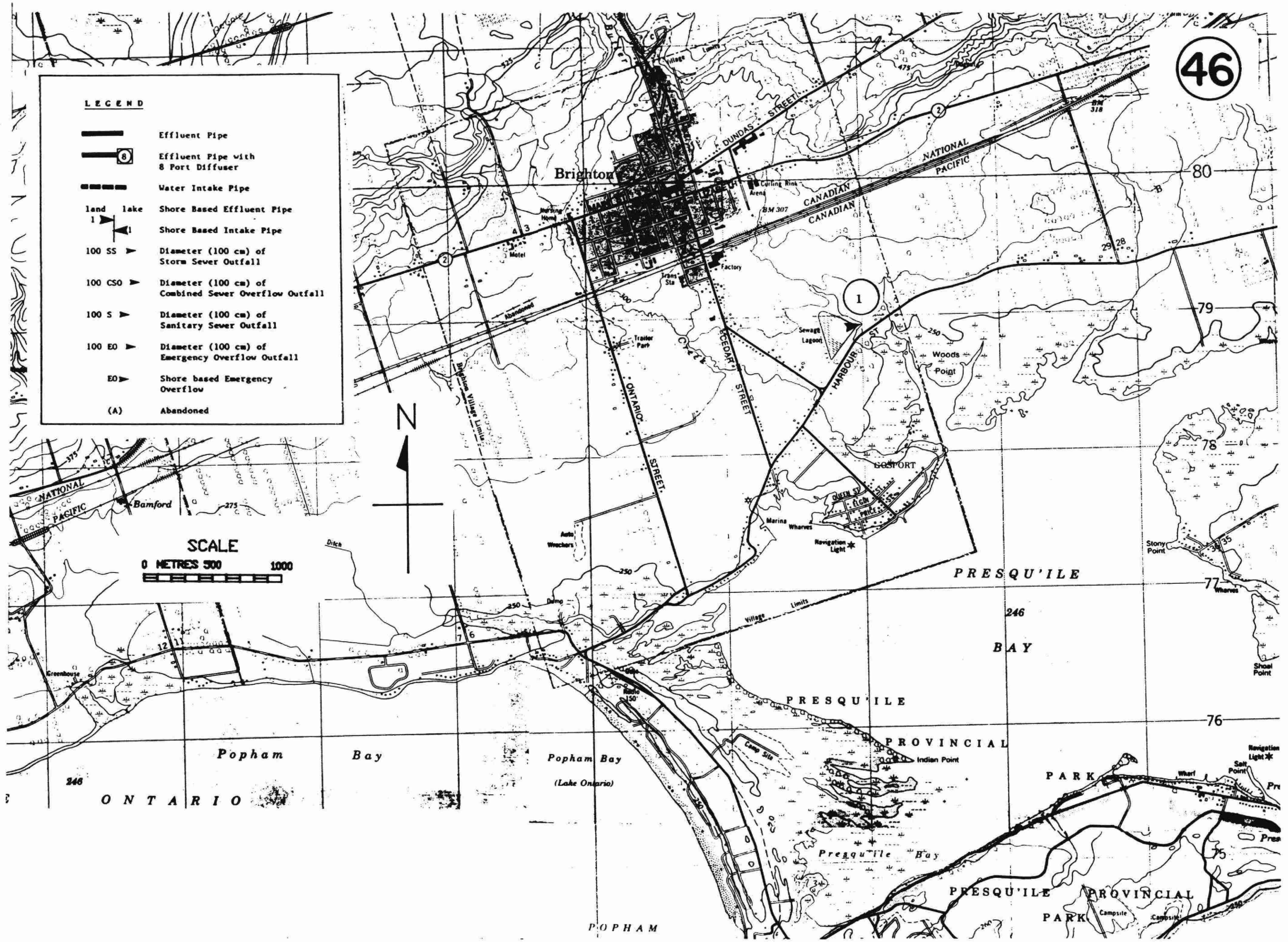




Name	Brighton STP						
Intake/Outfall	Outfall						
UNIS/INIS No.	110000953						
Structure No.	1						
Map Number	46						
Operating Authority	MDM						
Location	Brighton						
Supplier/Receiver	Creek to Presqu'ile Bay						
Point of Discharge	River Mouth						
Terminal Basin	Lake Ontario						
Activity	Municipal Sewage Treatment						
Process Type	Secondary Treatment						
Supply/Discharge Type	Continuous						
Treatment Type	Aerated Cell plus lagoon P Removal Continuous						
Comments							
Design Flow (1000m3/day)	3.86						
Mean Annual Flow (1000m3/day)	2.34						
Pipe length from shore (m)	0.00						
Pipe Diameter (cm)	45.00						
Water Depth at end of pipe (m)	0.00						
Water depth above end of pipe (m)	0.00						
Diffuser	NO						
Number of ports							

LEGEND

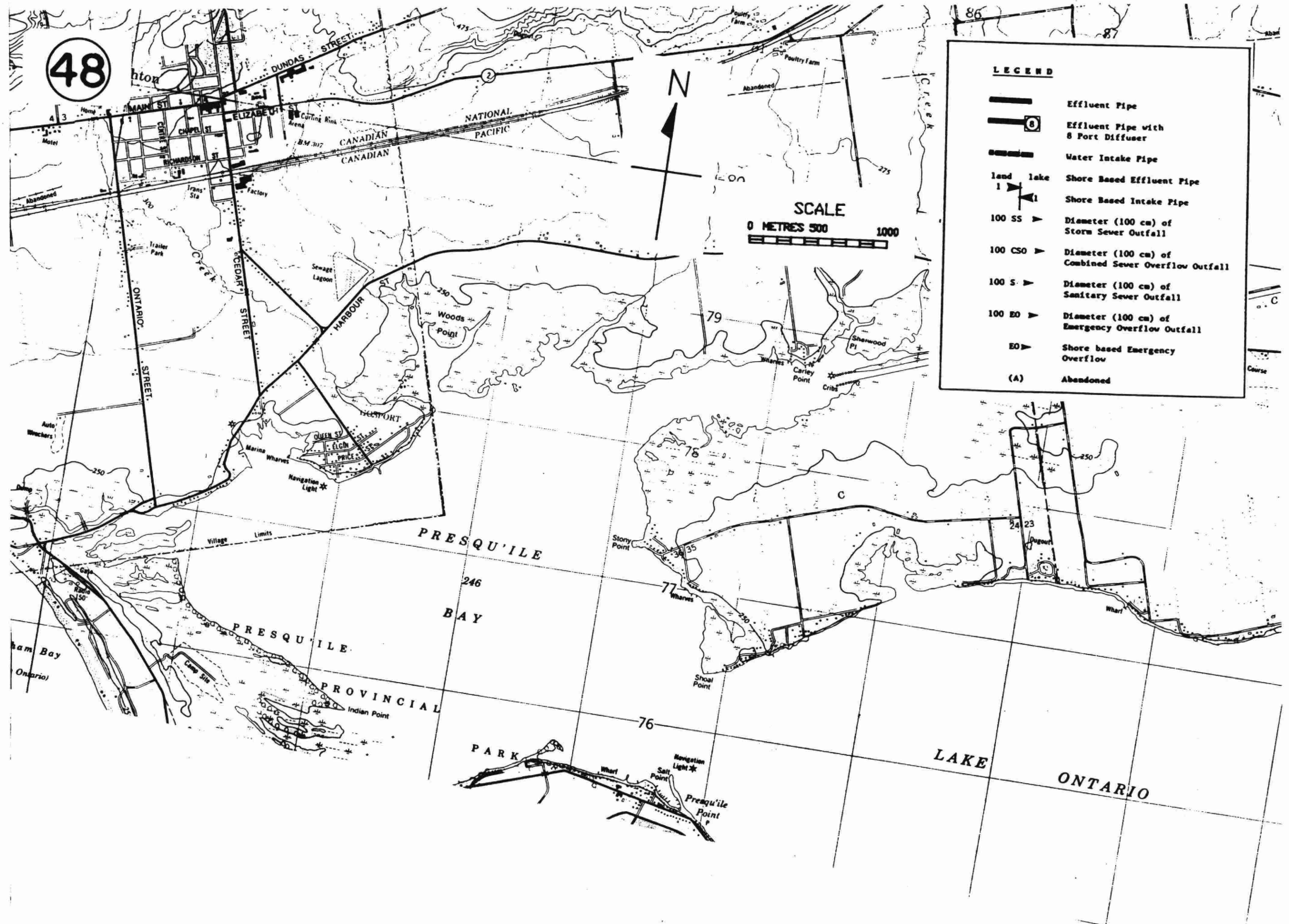
- Effluent Pipe
- Effluent Pipe with 8 Port Diffuser
- Water Intake Pipe
- Shore Based Effluent Pipe
- Shore Based Intake Pipe
- Diameter (100 cm) of Storm Sewer Outfall
- Diameter (100 cm) of Combined Sewer Overflow Outfall
- Diameter (100 cm) of Sanitary Sewer Outfall
- Diameter (100 cm) of Emergency Overflow Outfall
- Shore based Emergency Overflow
- Abandoned

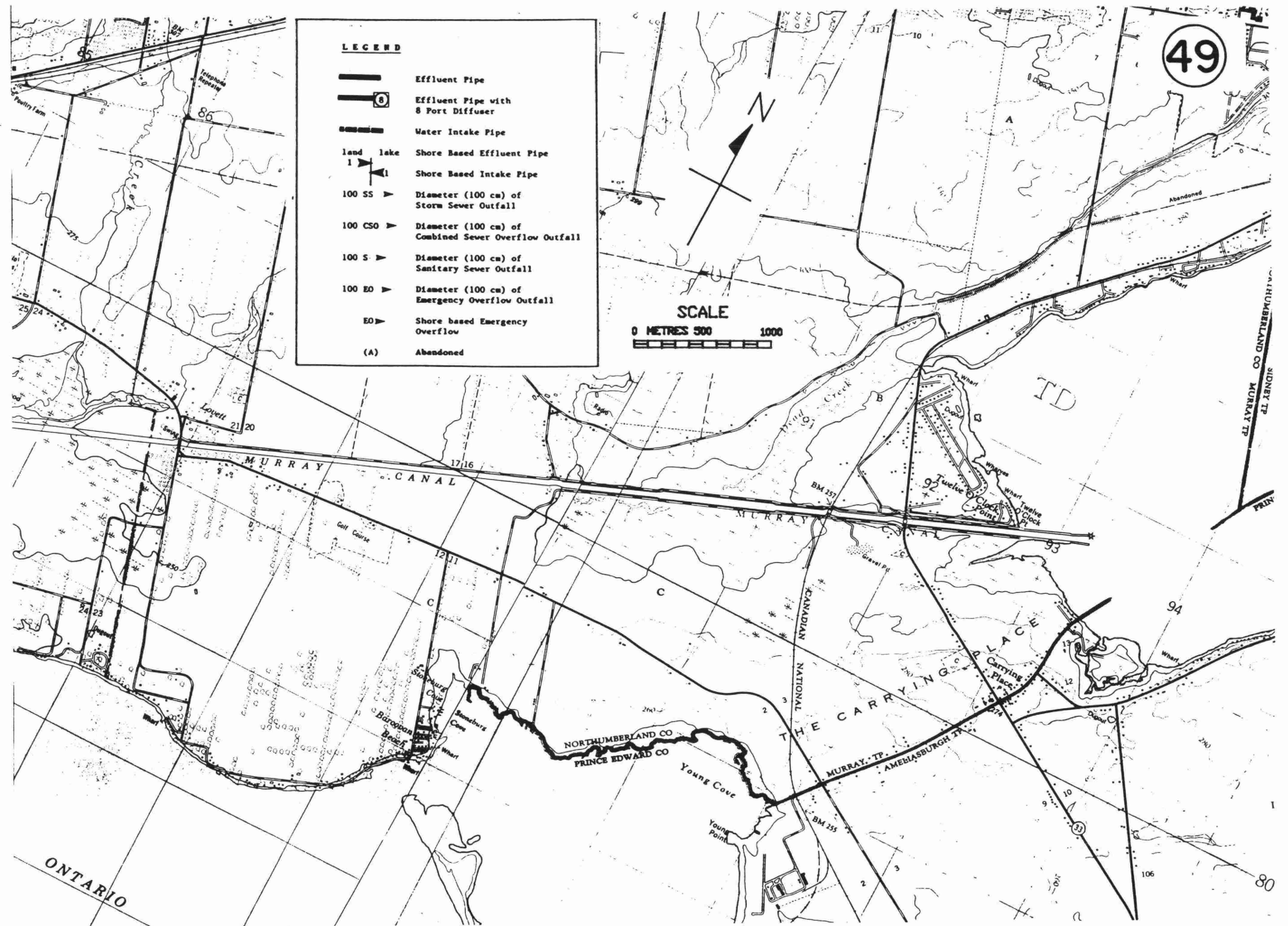


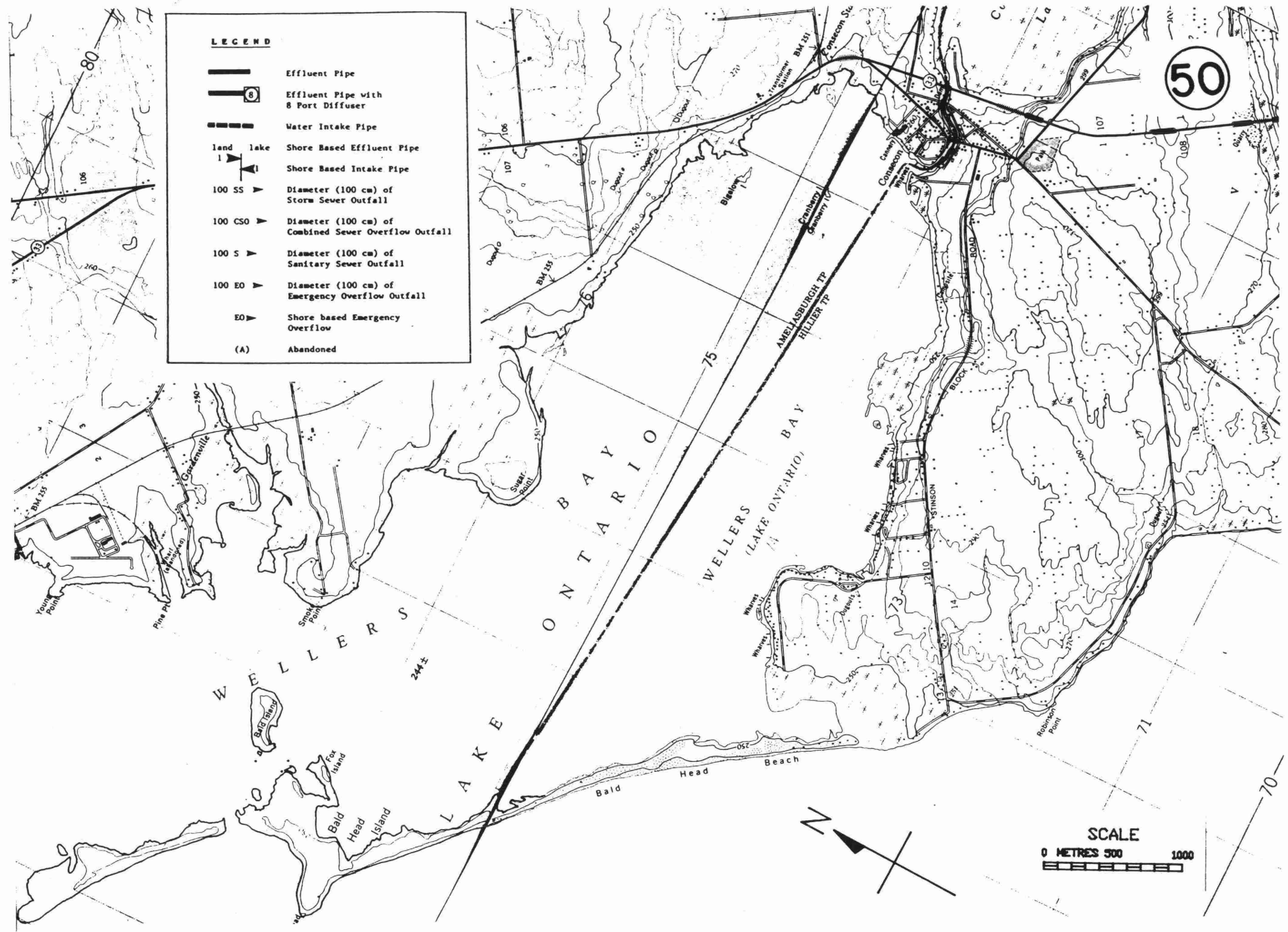
	Effluent Pipe
	Effluent Pipe with 8 Port Diffuser
	Water Intake Pipe
land lake 	Shore Based Effluent Pipe
	Shore Based Intake Pipe
100 SS 	Diameter (100 cm) of Storm Sewer Outfall
100 CSO 	Diameter (100 cm) of Combined Sewer Overflow Outfall
100 S 	Diameter (100 cm) of Sanitary Sewer Outfall
100 EO 	Diameter (100 cm) of Emergency Overflow Outfall
EO 	Shore based Emergency Overflow
(A)	Abandoned

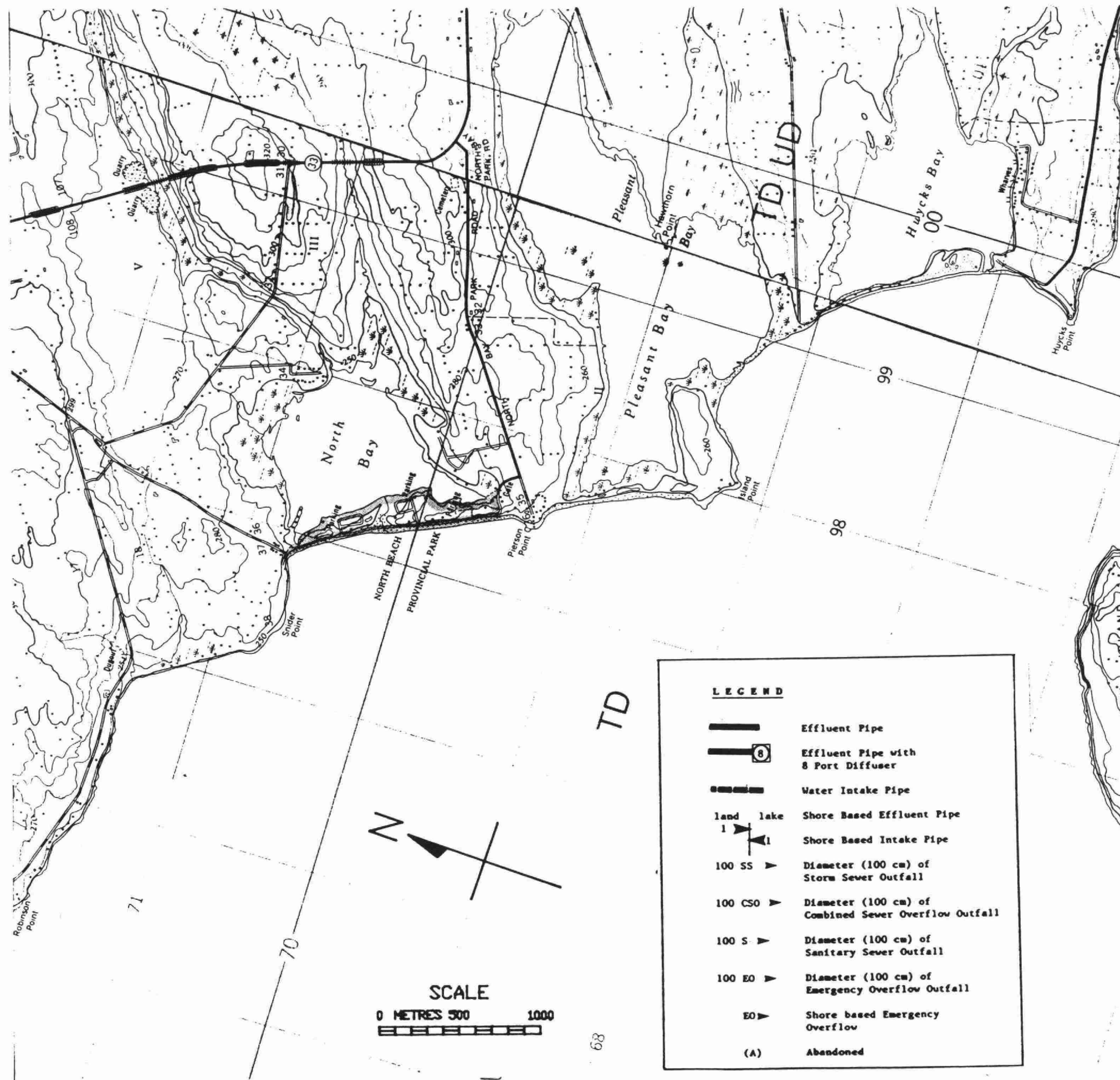
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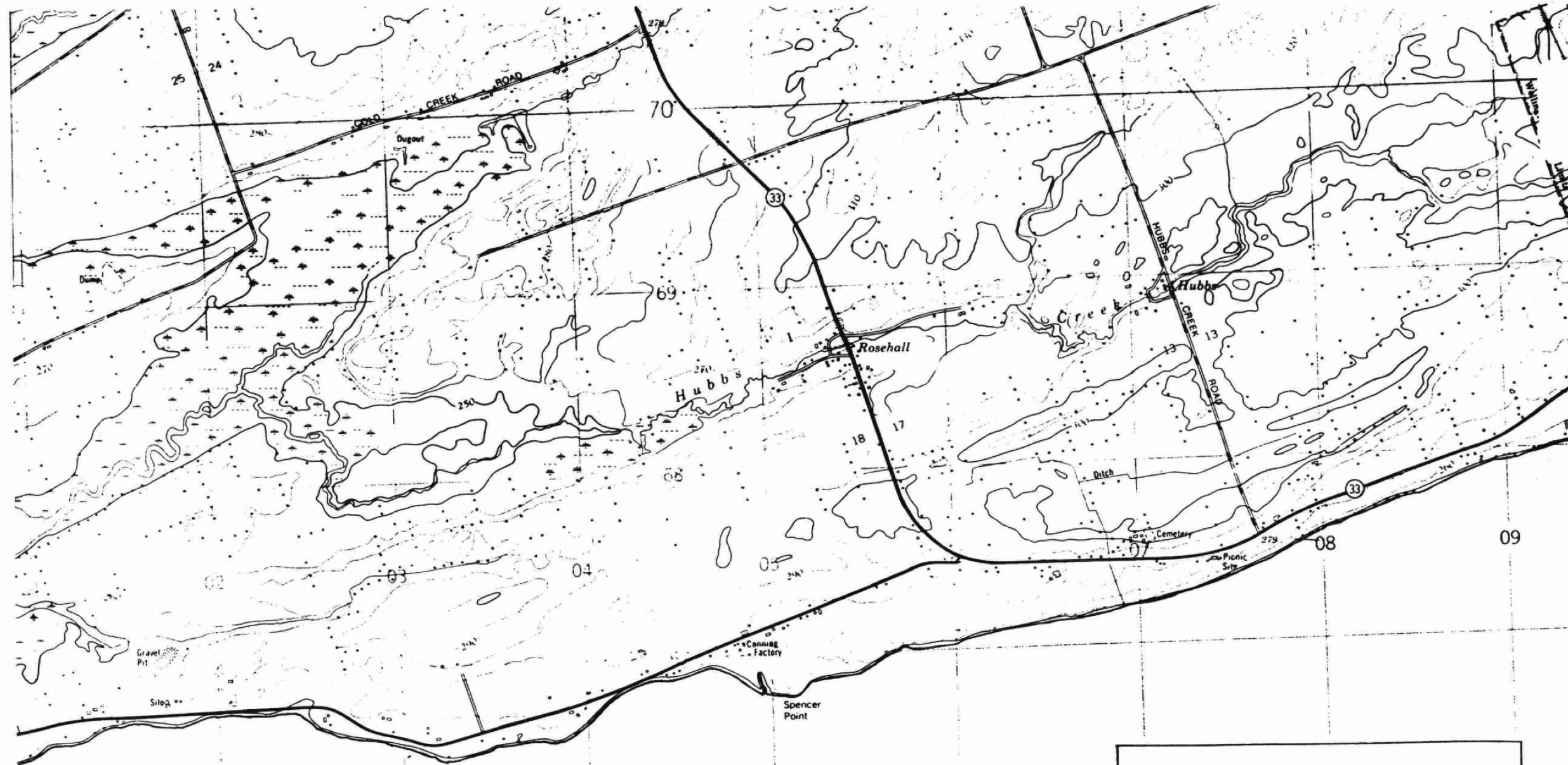





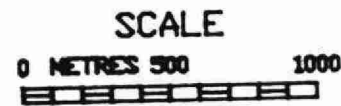




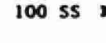
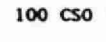
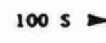
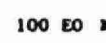
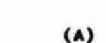
52



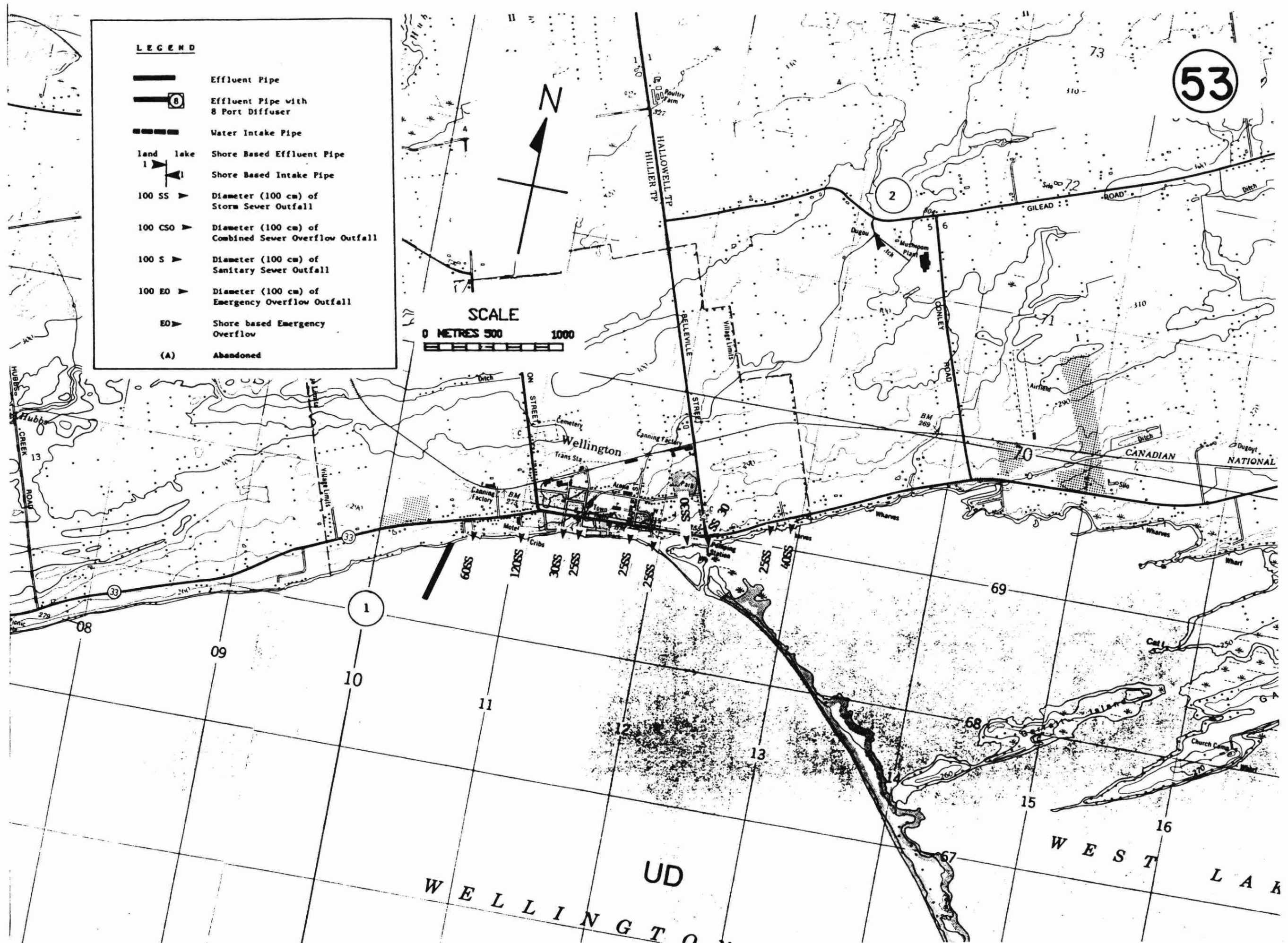
W E L L I N G T

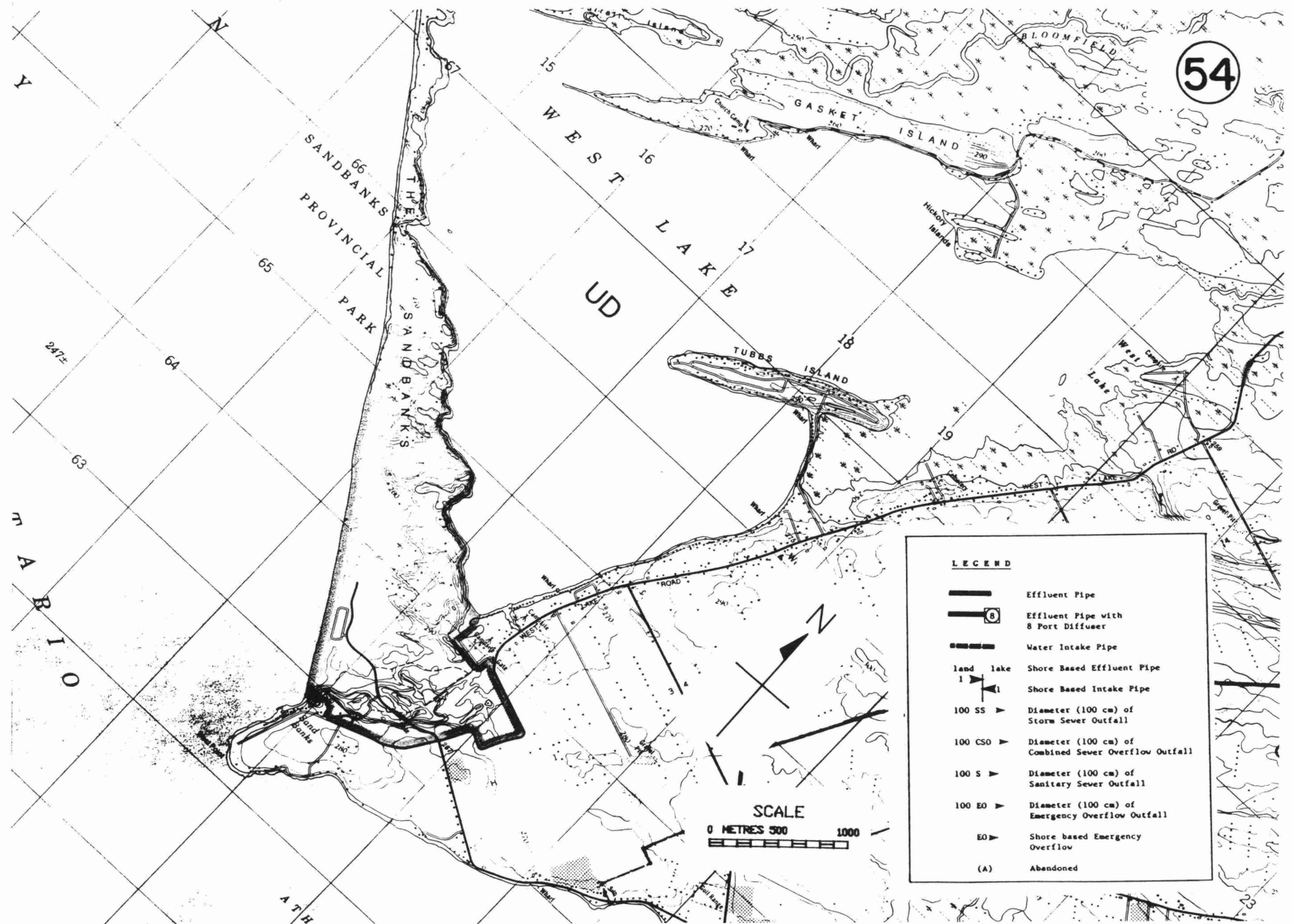


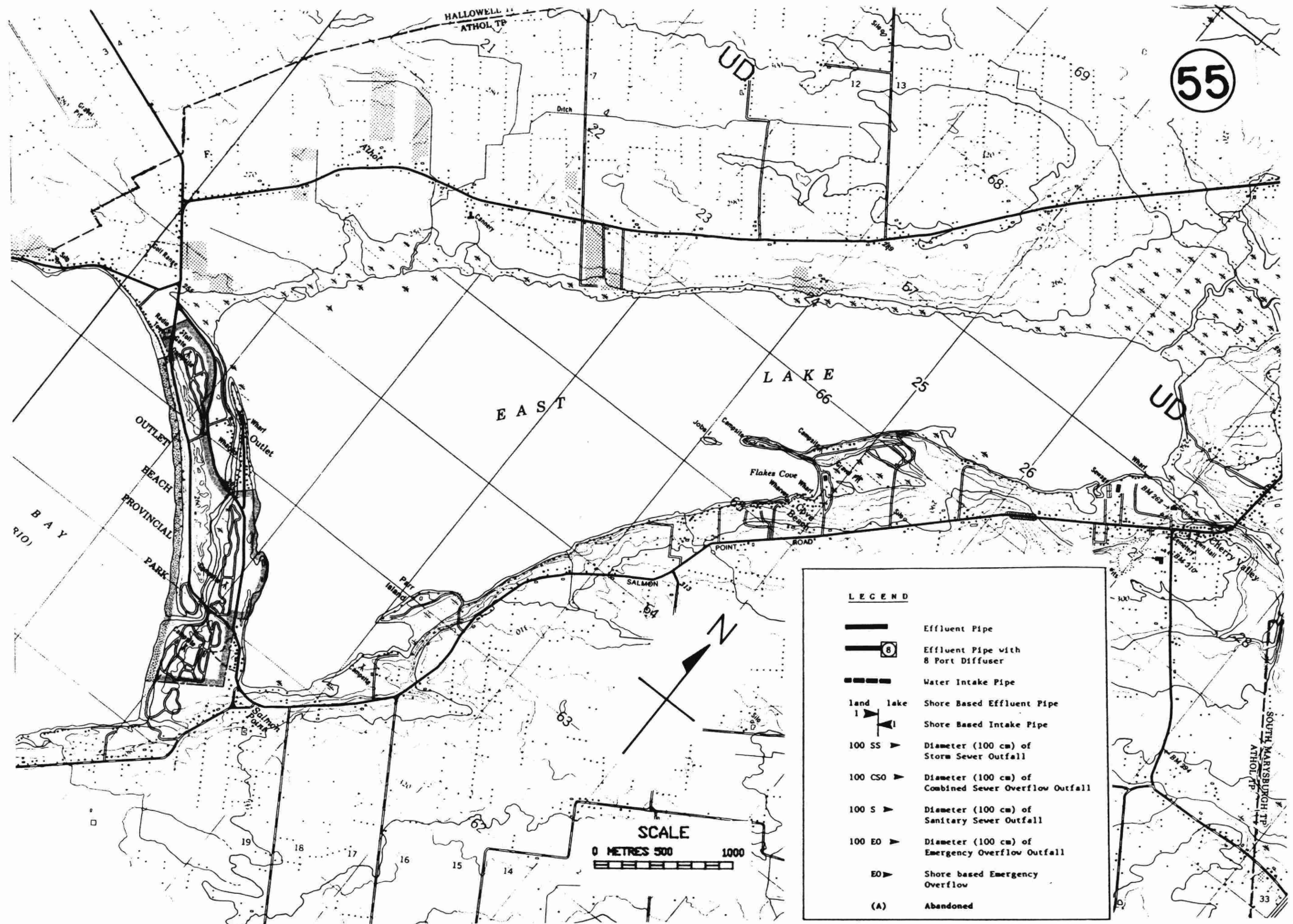
LEGEND

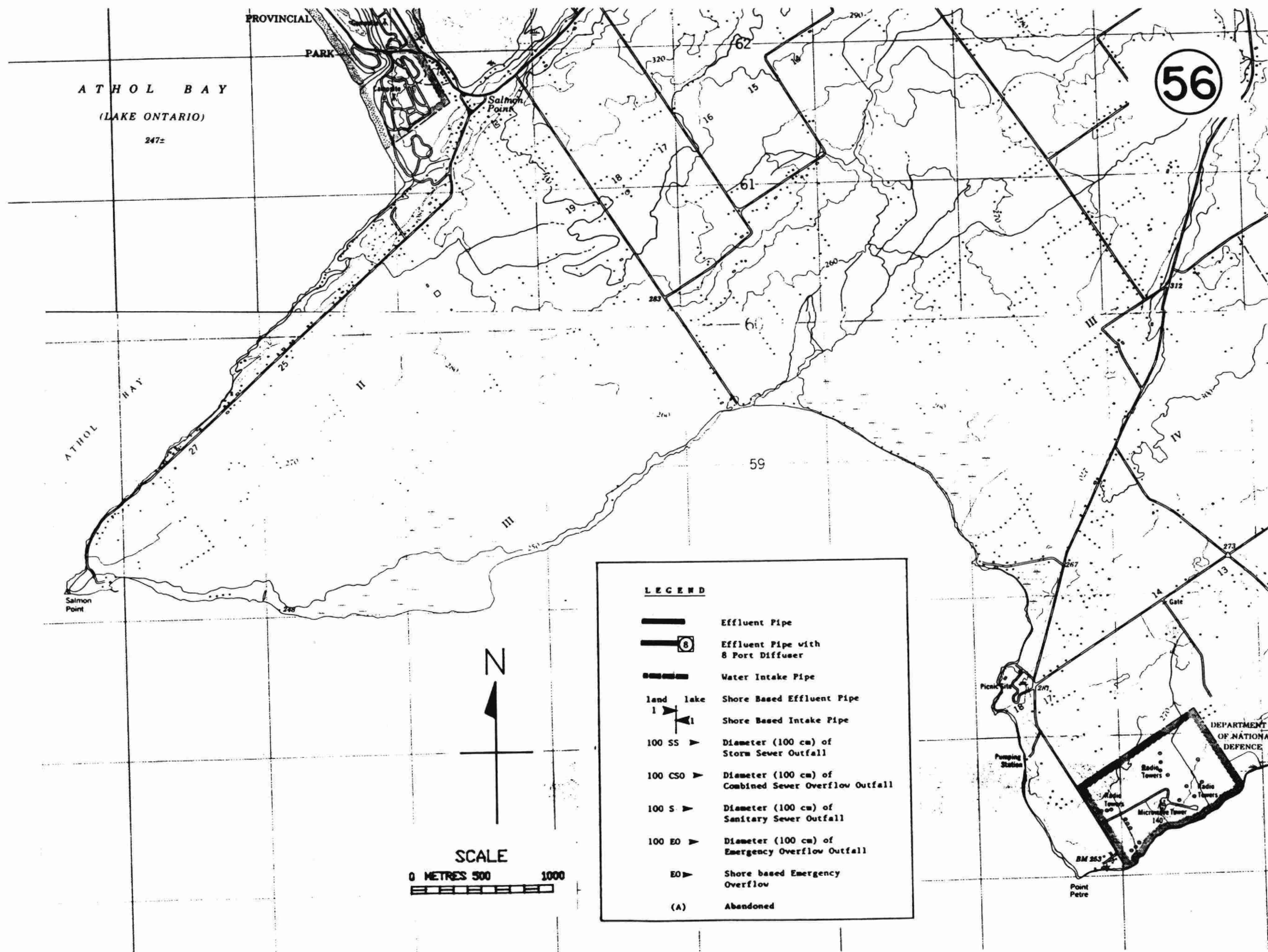
-  Effluent Pipe
-  Effluent Pipe with 8 Port Diffuser
-  Water Intake Pipe
-  Shore Based Effluent Pipe
-  Shore Based Intake Pipe
-  Diameter (100 cm) of Storm Sewer Outfall
-  Diameter (100 cm) of Combined Sewer Overflow Outfall
-  Diameter (100 cm) of Sanitary Sewer Outfall
-  Diameter (100 cm) of Emergency Overflow Outfall
-  Shore based Emergency Overflow
-  Abandoned

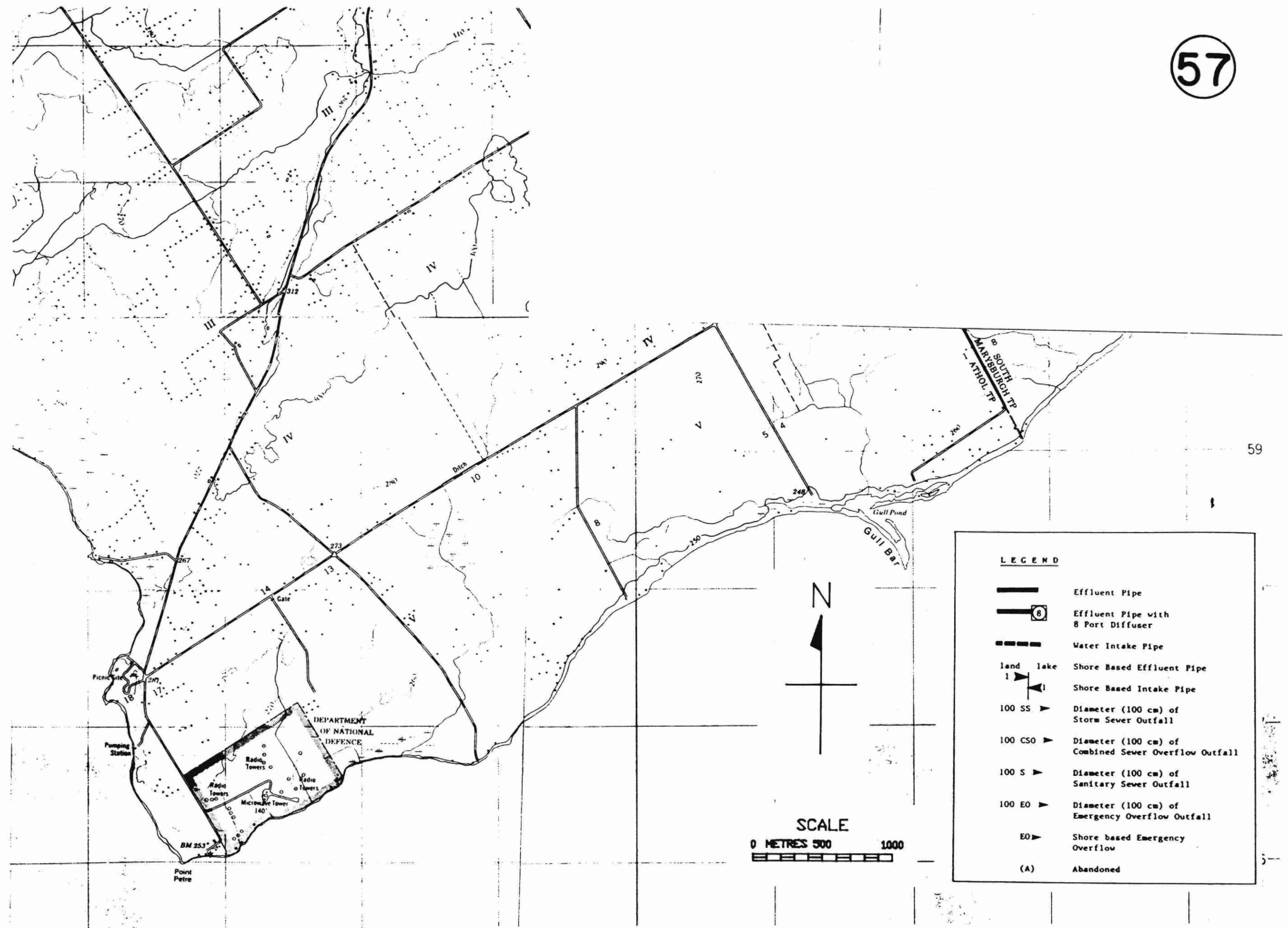
Name	Wellington WPCP	Wellington Mushroom Farm					
Intake/Outfall	Outfall	Outfall					
UMIS/IMIS No.	120003165	NA					
Structure No.	1	2					
Map Number	53	53					
Operating Authority	MUN	IND					
Location	Wellington	Wellington					
Supplier/Receiver	Wellington Bay	Creek to West Lake					
Point of Discharge	Embayment	River Mouth					
Terminal Basin	Lake Ontario	Lake Ontario					
Activity	Municipal Sewage Treatment	Food Processing					
Process Type	Secondary Treatment	Mushroom cleaning and packaging					
Supply/Discharge Type	Continuous	Continuous					
Treatment Type	Activated Sludge Extended Aeration P Removal-Continuous	Conventional Lagoon Filtration, Aeration Chemical settling agent					
Comments		Operation is owned by the Campbell Soup Co. Ltd.					
Design Flow (1000m3/day)	1.50	0.09					
Mean Annual Flow (1000m3/day)	0.90	0.09					
Pipe length from shore (m)	400.00	0.00					
Pipe Diameter (cm)	60.00	15.00					
Water Depth at end of pipe (m)	6.10	0.00					
Water depth above end of pipe (m)	6.70	0.00					
Diffuser	NO	NO					
Number of ports							



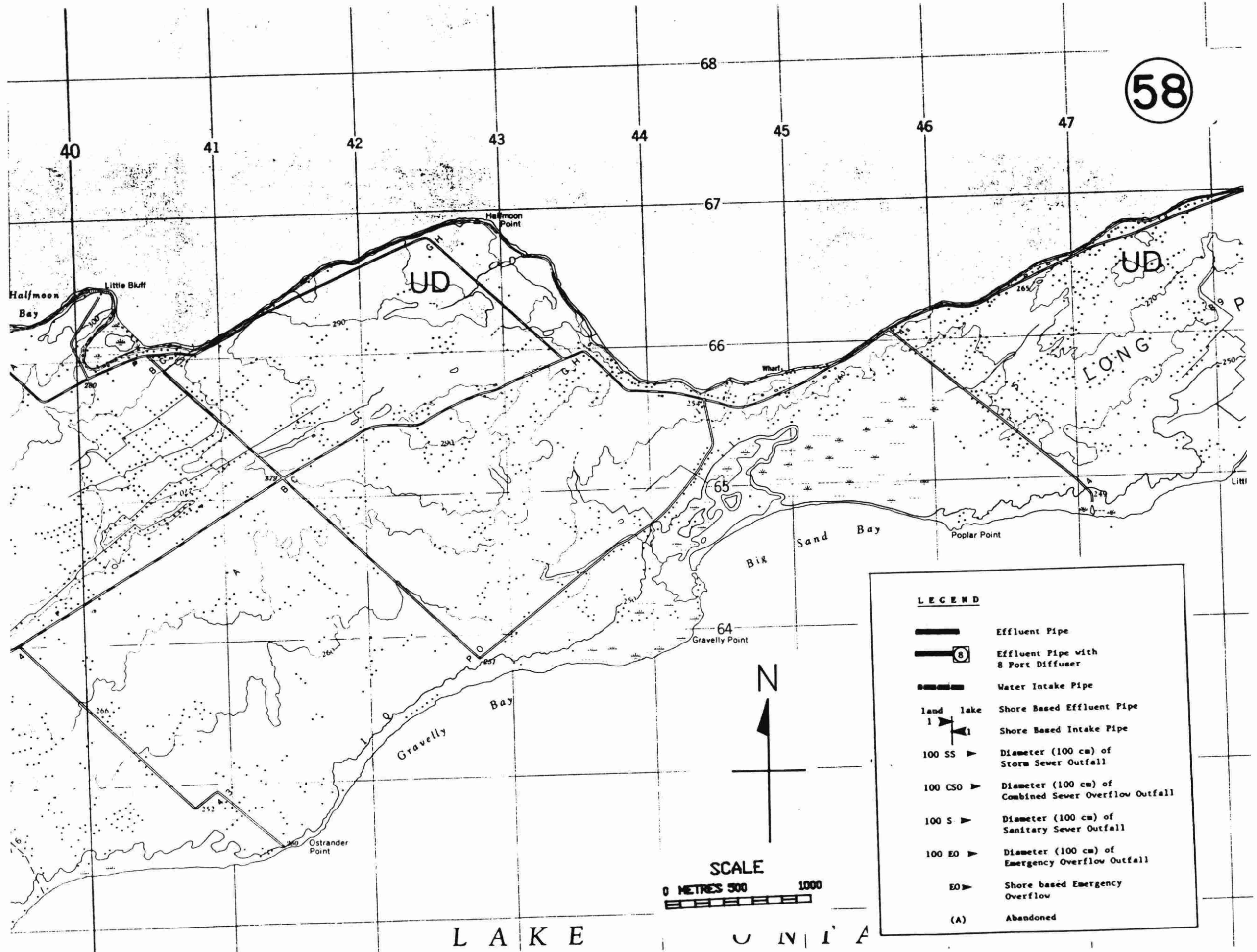






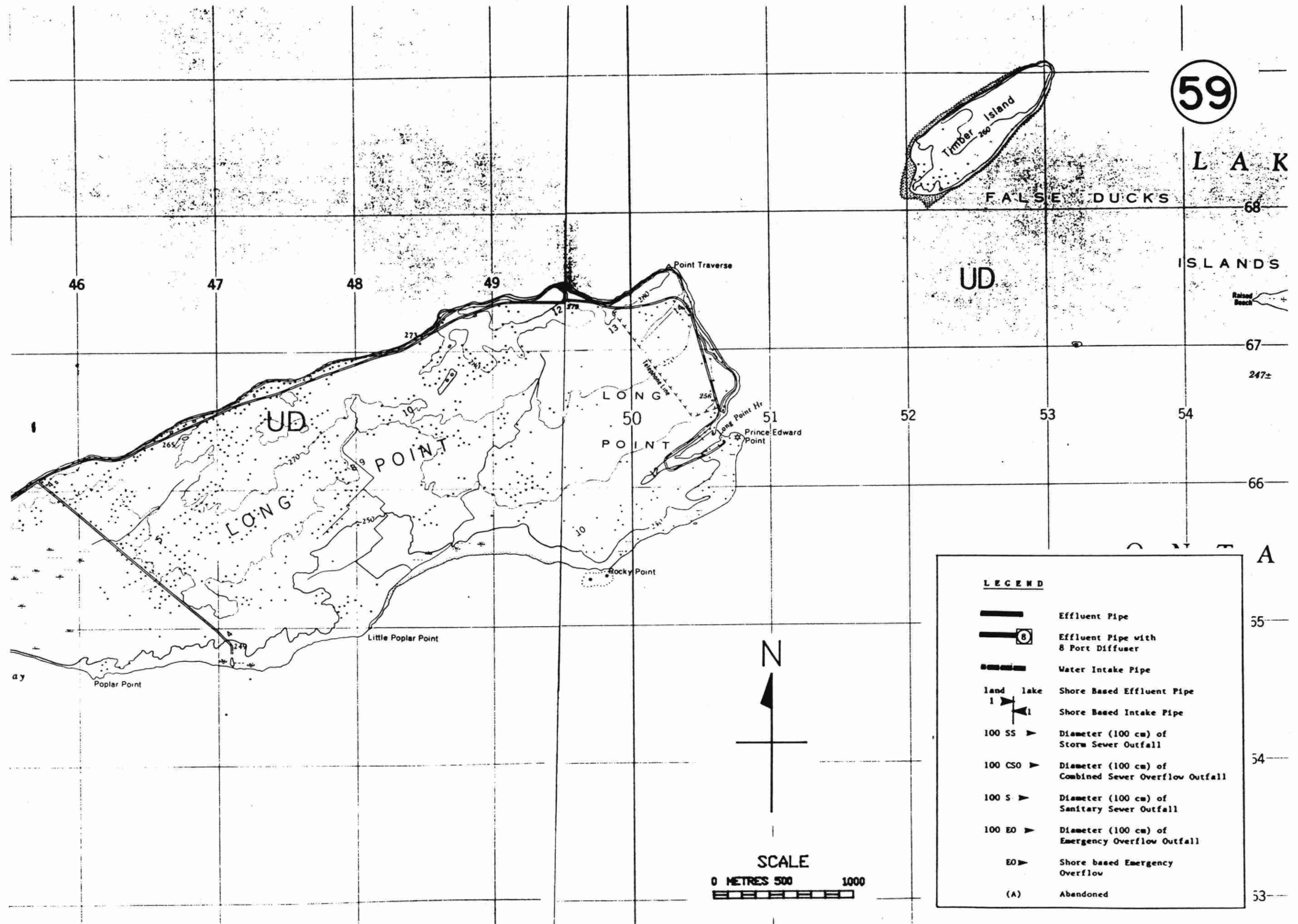


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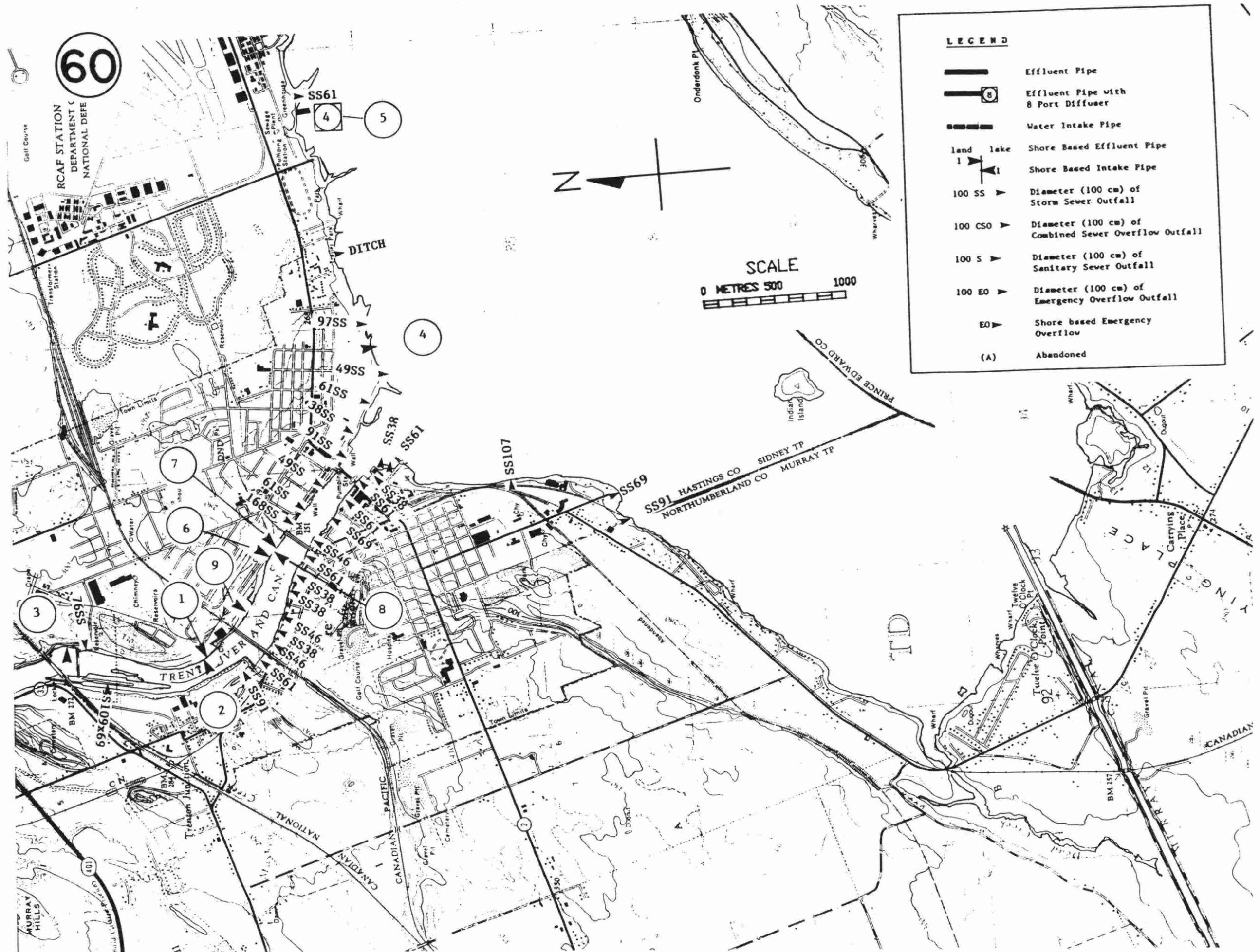


LEGEND

- Effluent Pipe
- Effluent Pipe with 8 Port Diffuser
- Water Intake Pipe
- Shore Based Effluent Pipe
- Shore Based Intake Pipe
- Diameter (100 cm) of Storm Sever Outfall
- Diameter (100 cm) of Combined Sewer Overflow Outfall
- Diameter (100 cm) of Sanitary Sever Outfall
- Diameter (100 cm) of Emergency Overflow Outfall
- Shore based Emergency Overflow
- Abandoned



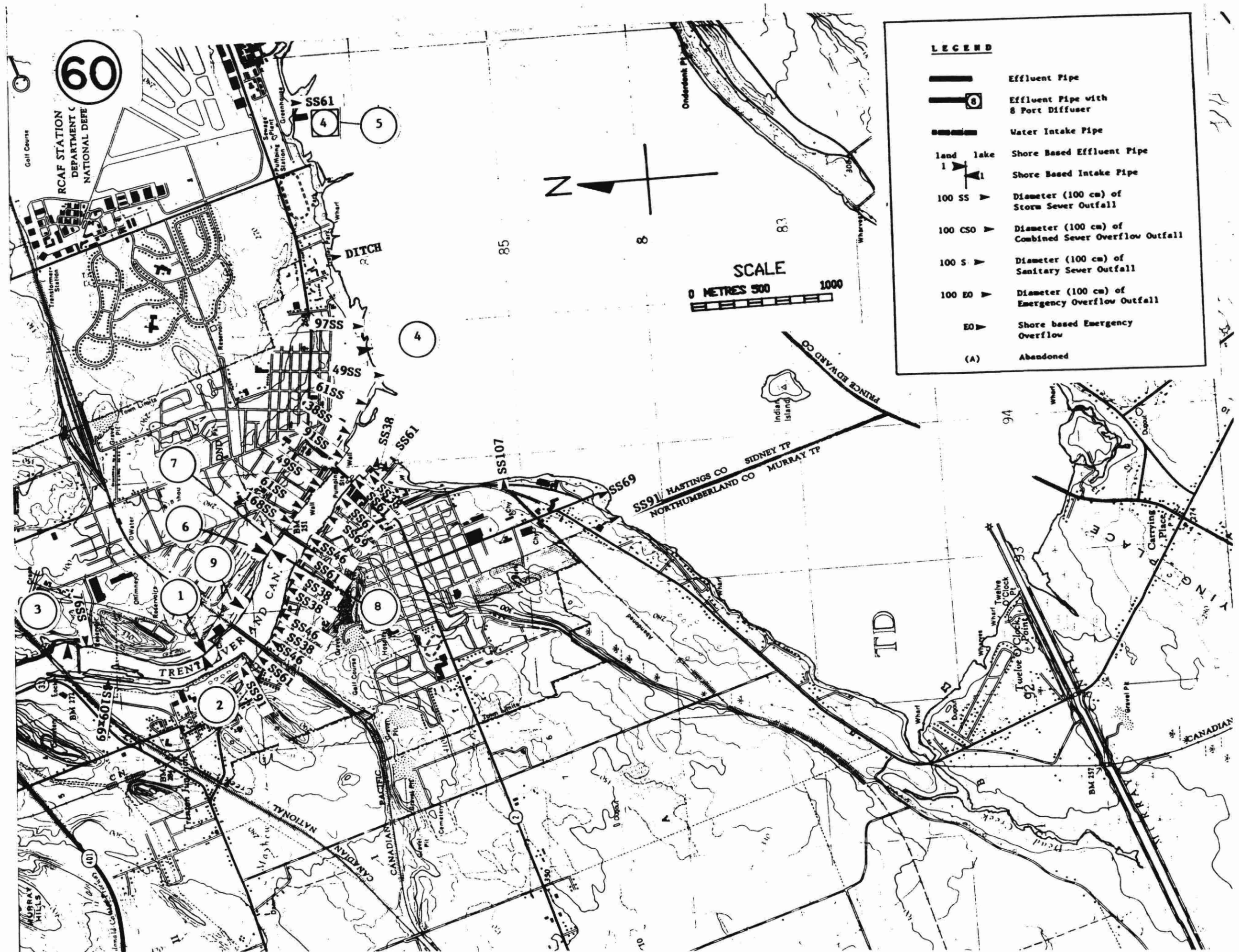
Name	Dontar Packaging	Dontar Packaging	Trenton WTP	Trenton NPCP	CFB Trenton NPCP	Dontar Wood Preserving	Dontar Wood Preserving
Intake/Outfall	Outfall	Intake	Intake	Outfall	Outfall	Outfall	Outfall
OHIS/INIS No.	0000140608	0000140608	NA	110000775	130000014	0000141200	0000141200
Structure No.	1	2	3	4	5	6	7
Map Number	60	60	60	60	60	60	60
Operating Authority	IND	IND	MUN PBC	MOE	DND	IND	IND
Location	Trenton	Trenton	Trenton	Trenton	Trenton	Trenton	Trenton
Supplier/Receiver	Trent River	Trent River	Trent River	Bay of Quinte	Bay of Quinte	Trent River	Trent River
Point of Discharge	River Mouth			Shore	Offshore	River Mouth	River Mouth
Terminal Basin	Lake Ontario	Lake Ontario	Lake Ontario	Lake Ontario	Lake Ontario	Lake Ontario	Lake Ontario
Activity	Pulp & Paper Mill	Pulp & Paper Mill	Municipal Water Treatment	Municipal Sewage Treatment	Sewage Treatment	Wood Preserving of Railway Ties and Utility Poles	Wood Preserving of Railway Ties and Utility Poles
Process Type	Wood pulp & recycled Fibre to produce corrugated medium	Wood pulp & recycled Fibre to produce corrugated medium	Physical and Chemical Treatment	Secondary Treatment	Secondary Treatment	Creosote for Railway Ties and Pentachlorophenol for Utility Poles	Creosote for Railway Ties and Pentachlorophenol for Utility Poles
Supply/Discharge Type	Continuous	Continuous	Continuous	Continuous	Continuous	Continuous	Continuous
Treatment Type	Suspended solids removal by Filtration	Coarse Screened and Strained Boiler water filtered and softened	Conventional Filtration Flocculation, Alum Settling and Chlorination	Activated Sludge, Chlorination, P Removal-Continuous	Conventional Activated Sludge, Anaerobic Digestion, Chlorination P Removal-Continuous	API Separator	Part of Flow Treated by Activated Carbon Filters
Comments							
Design Flow (1000m3/day)	2.50	10.90	22.70	15.90	5.46	NA	NA
Mean Annual Flow (1000m3/day)	4.20	4.90	7.20	11.24	6.09	1.00	0.10
Pipe length from shore (m)	73.00	0.00	42.60	6.00	91.00	0.00	0.00
Pipe Diameter (cm)	25.40	121.90	40.64	122.00	60.00	NA	NA
Water Depth at end of pipe (m)	2.00	6.00	4.00	2.50	2.00	NA	NA
Water depth above end of pipe (m)	1.75	4.78	NA	1.00	1.00	NA	NA
Diffuser	YES			NO	YES	NO	NO
Number of ports	20				4		

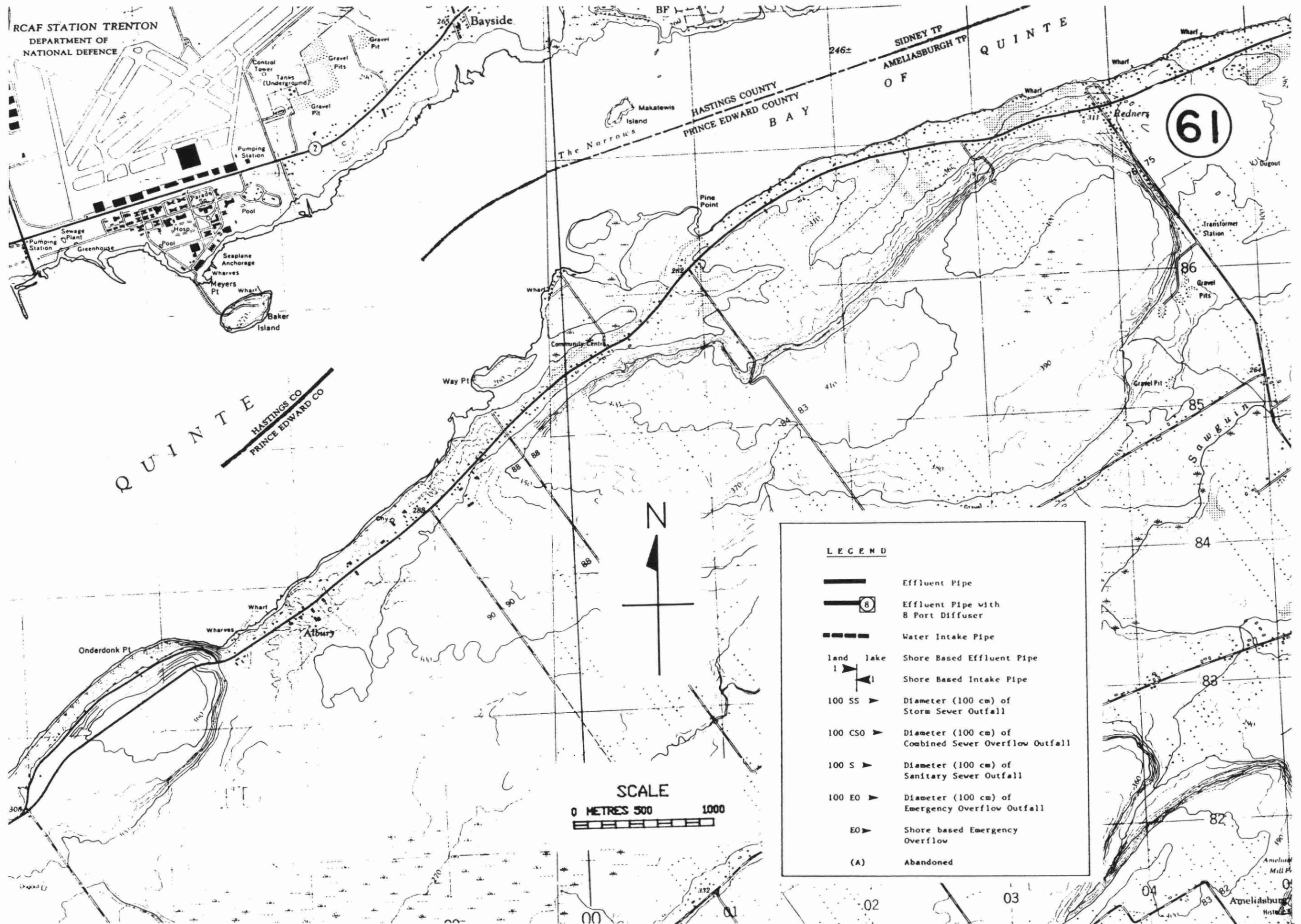


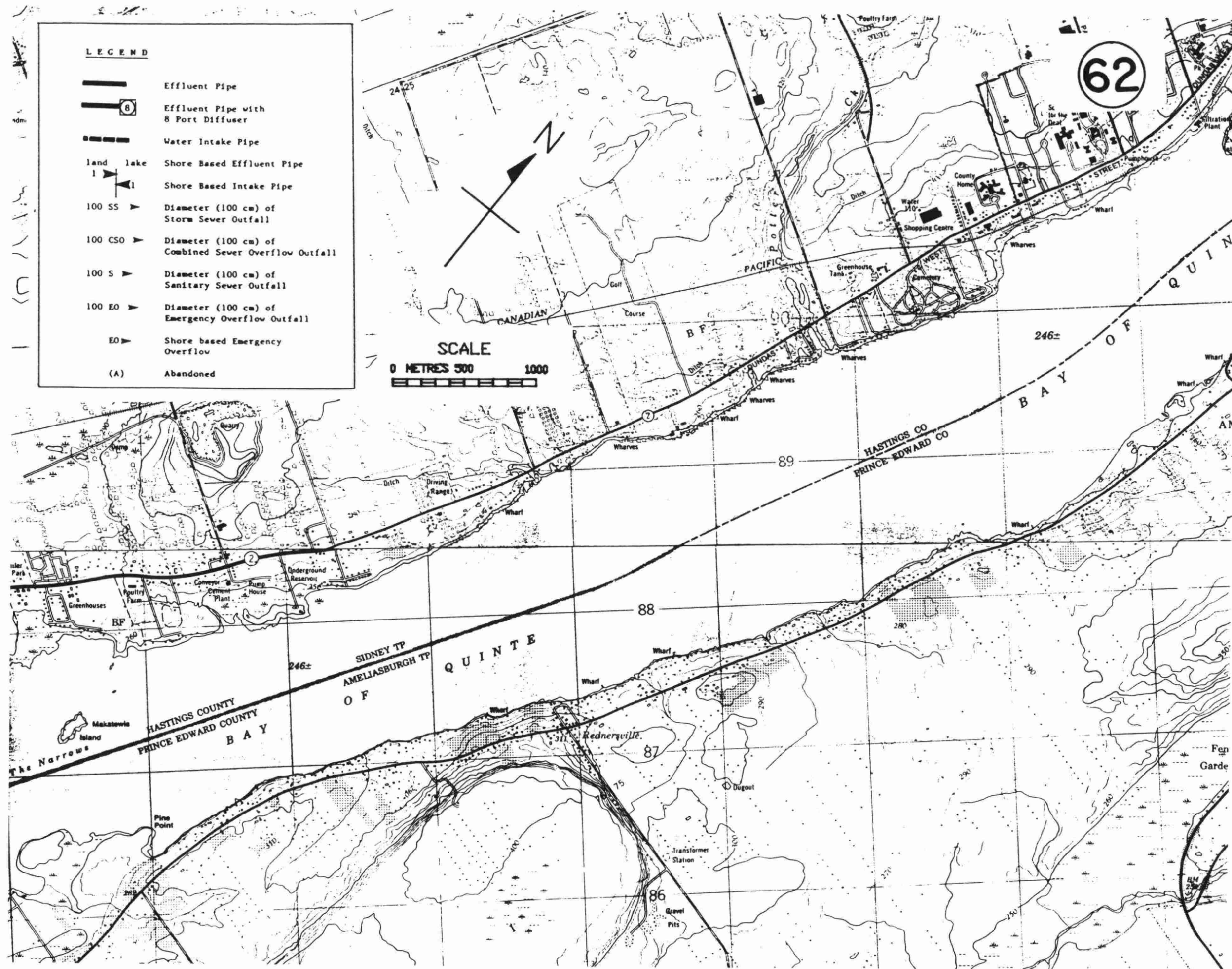
LEGEND

- Effluent Pipe
- 8 Effluent Pipe with 8 Port Diffuser
- Water Intake Pipe
- land lake Shore Based Effluent Pipe
- Shore Based Intake Pipe
- 100 SS Diameter (100 cm) of Storm Sewer Outfall
- 100 CSO Diameter (100 cm) of Combined Sewer Overflow Outfall
- 100 S Diameter (100 cm) of Sanitary Sewer Outfall
- 100 EO Diameter (100 cm) of Emergency Overflow Outfall
- EO Shore based Emergency Overflow
- (A) Abandoned

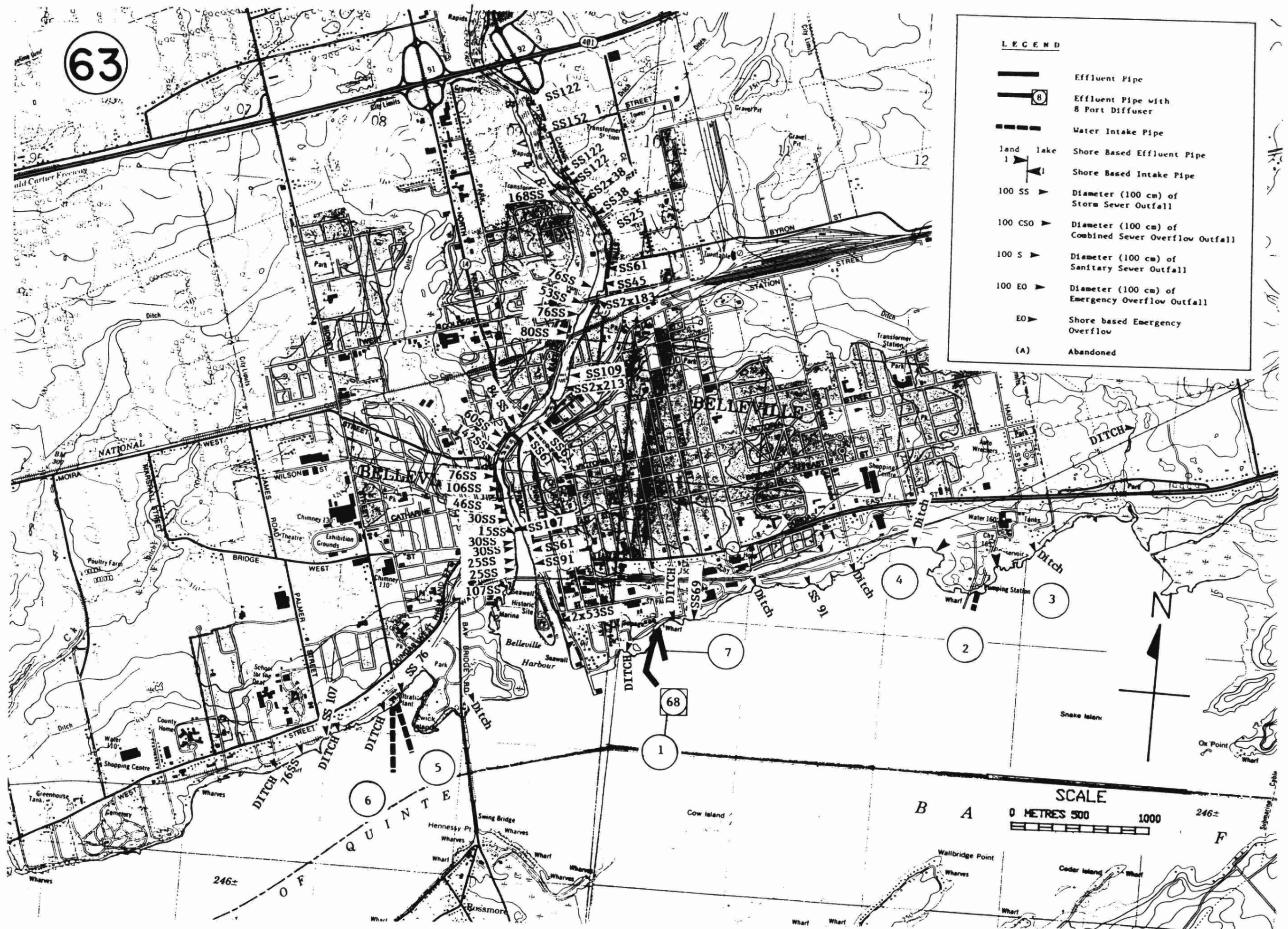
Name	Dontar Wood Preserving	Dontar Wood Preserving					
Intake/Outfall	Intake	Outfall					
UMIS/INIS No.	0000141200	0000141200					
Structure No.	8	9					
Map Number	60	60					
Operating Authority	IND	IND					
Location	Trenton	Trenton					
Supplier/Receiver	Trent River	Trent River					
Point of Discharge		River Mouth					
Terminal Basin	Lake Ontario	Lake Ontario					
Activity	Wood Preserving of Railway Ties and Utility Poles	Wood Preserving of Railway Ties and Utility Poles					
Process Type	Creosote for Railway Ties and Pentachlorophenol for Utility Poles	Creosote for Railway Ties and Pentachlorophenol for Utility Poles					
Supply/Discharge Type	Continuous	NA					
Treatment Type	No Treatment	NA					
Comments							
Design Flow (1000m3/day)	2.00	NA					
Mean Annual Flow (1000m3/day)	NA	0.07					
Pipe length from shore (m)	5.00	NA					
Pipe Diameter (cm)	7.60	NA					
Water Depth at end of pipe (m)	2.50	NA					
Water depth above end of pipe (m)	2.50	NA					
Diffuser		NO					
Number of ports							



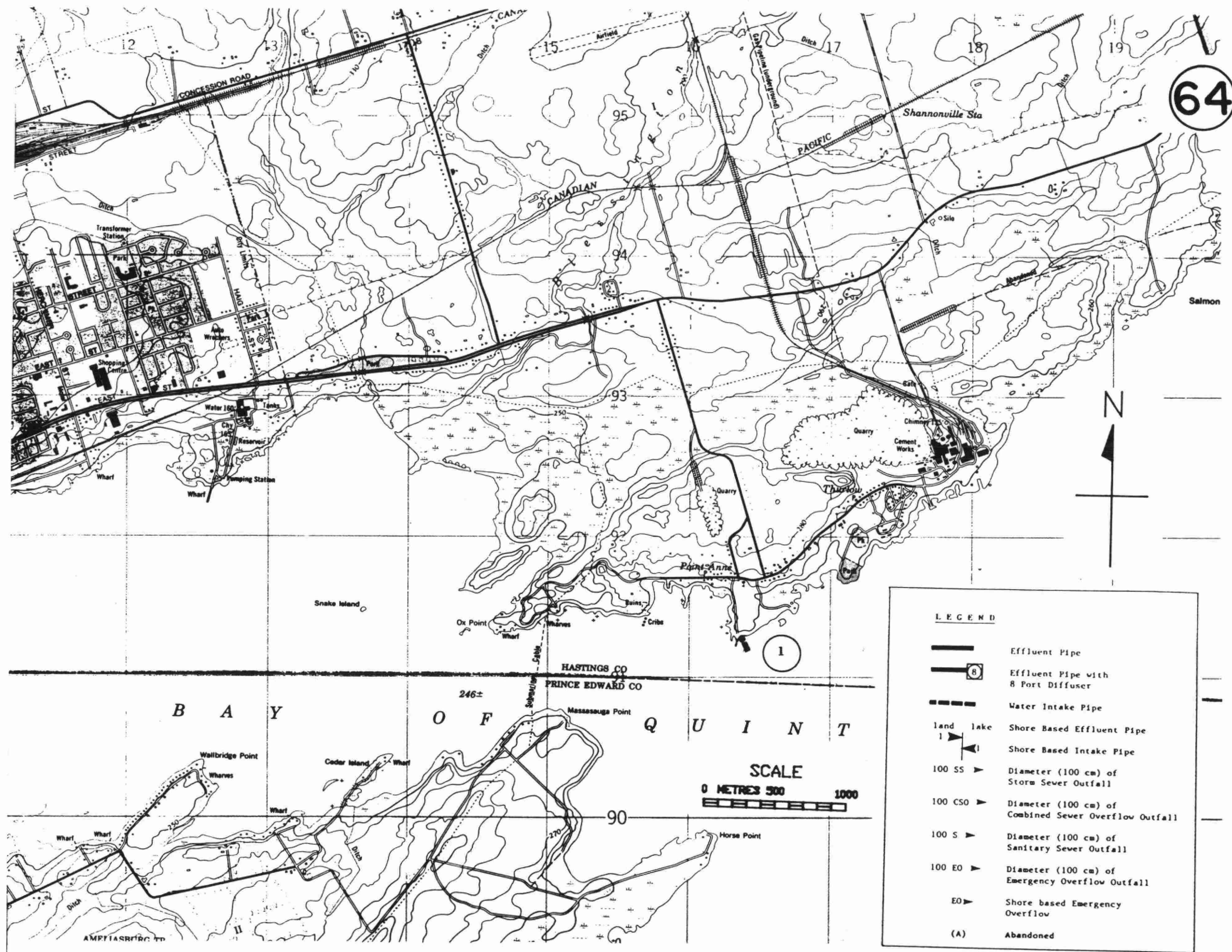


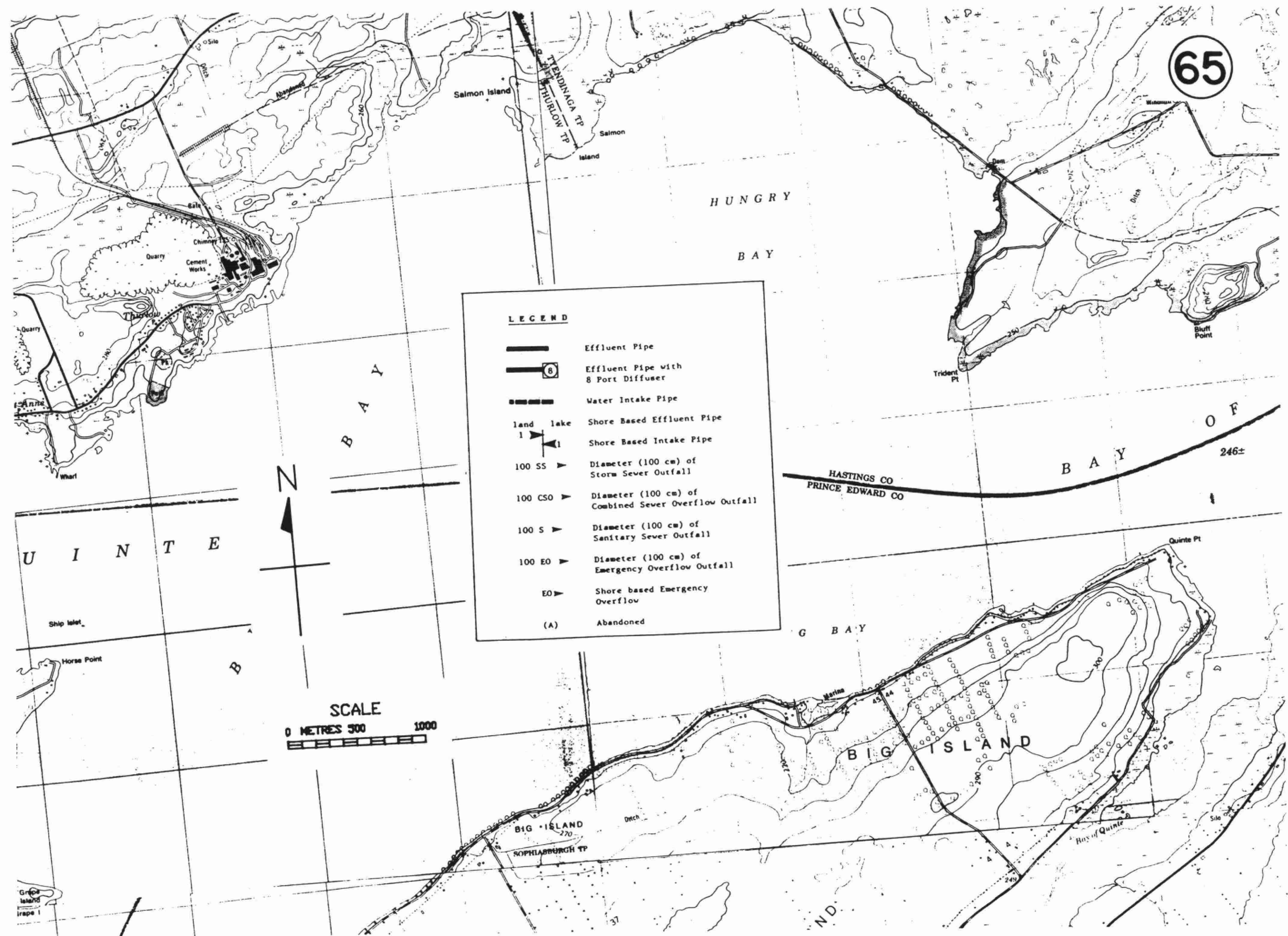


Name	Belleville WPCP	Bakelite Thermosets	Bakelite Thermosets	Bakelite Thermosets	Belleville WTP	Belleville WTP	Belleville WPCP
Intake/Outfall	Outfall	Intake	Outfall	Outfall	Intake	Intake	Outfall
UMIS/IMIS No.	110000016	0001860006	0001860006	0001860006	220002217	220002217	110000016
Structure No.	1	2	3	4	5	6	7
Map Number	63	63	63	63	63	63	63
Operating Authority	MOE	IND	IND	IND	MUN PUC	MUN PUC	MOE
Location	Belleville	Belleville	Belleville	Belleville	Belleville	Belleville	Belleville
Supplier/Receiver	Bay Of Quinte	Bay of Quinte	Bay of Quinte	Bay of Quinte	Bay of Quinte	Bay of Quinte	Bay of Quinte
Point of Discharge	Embayment		Embayment	Embayment			Embayment
Terminal Basin	Lake Ontario	Lake Ontario	Lake Ontario	Lake Ontario	Lake Ontario	Lake Ontario	Lake Ontario
Activity	Municipal Sewage Treatment	Resin Manufacturing	Resin Manufacturing	Resin Manufacturing	Municipal Water Treatment	Municipal Water Treatment	Municipal Sewage Treatment
Process Type	Secondary Treatment	NA	NA	NA	Physical and Chemical	Physical and Chemical	Secondary Treatment
Supply/Discharge Type	Continuous	Continuous	Continuous	Continuous	Continuous	Continuous	Intermittent
Treatment Type	Activated Sludge, Chlorination, P Removal - Continuous	Sand bed filters and chlorination	No Treatment of East Ditch process cooling water	No Treatment of West Ditch process cooling water	Micro straining, filtration, coagulation, settling, chlorination, fluoridation	Micro straining, filtration, coagulation, settling, chlorination, fluoridation	Activated Sludge, Chlorination, P Removal - Continuous
Comments		Bulk of water not treated	Structures No.s 3 & 4 to be combined into one ditch in fall 1987	Structures No.s 3 & 4 to be combined into one ditch in fall 1987			Emergency Overflow Outfall
Design Flow (1000m3/day)	165.00	218.10	218.00	218.00	90.87	136.30	165.00
Mean Annual Flow (1000m3/day)	40.20	163.00	163.00	163.00	45.40	45.40	40.20
Pipe length from shore (m)	457.70	137.00	0.00	0.00	370.00	488.00	206.00
Pipe Diameter (cm)	135.00	76.00	Open Ditch	Open Ditch	79.00	91.40	90.00
Water Depth at end of pipe (m)	4.00	4.00	0.00	0.00	5.50	5.50	NA
Water depth above end of pipe (m)	4.00	3.00	0.00	0.00	4.00	5.25	NA
Diffuser	YES		NO	NO			NO
Number of ports	68						

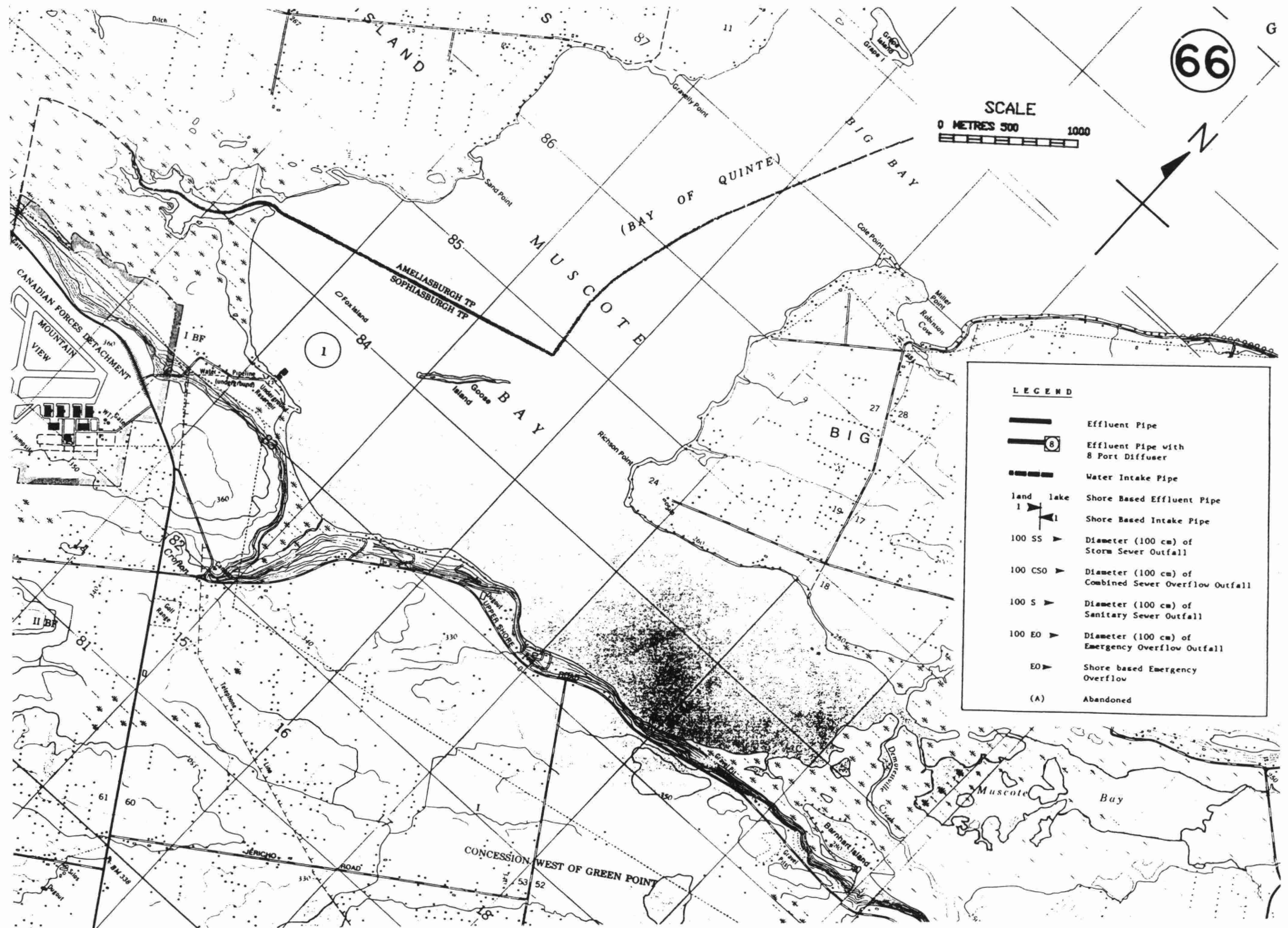


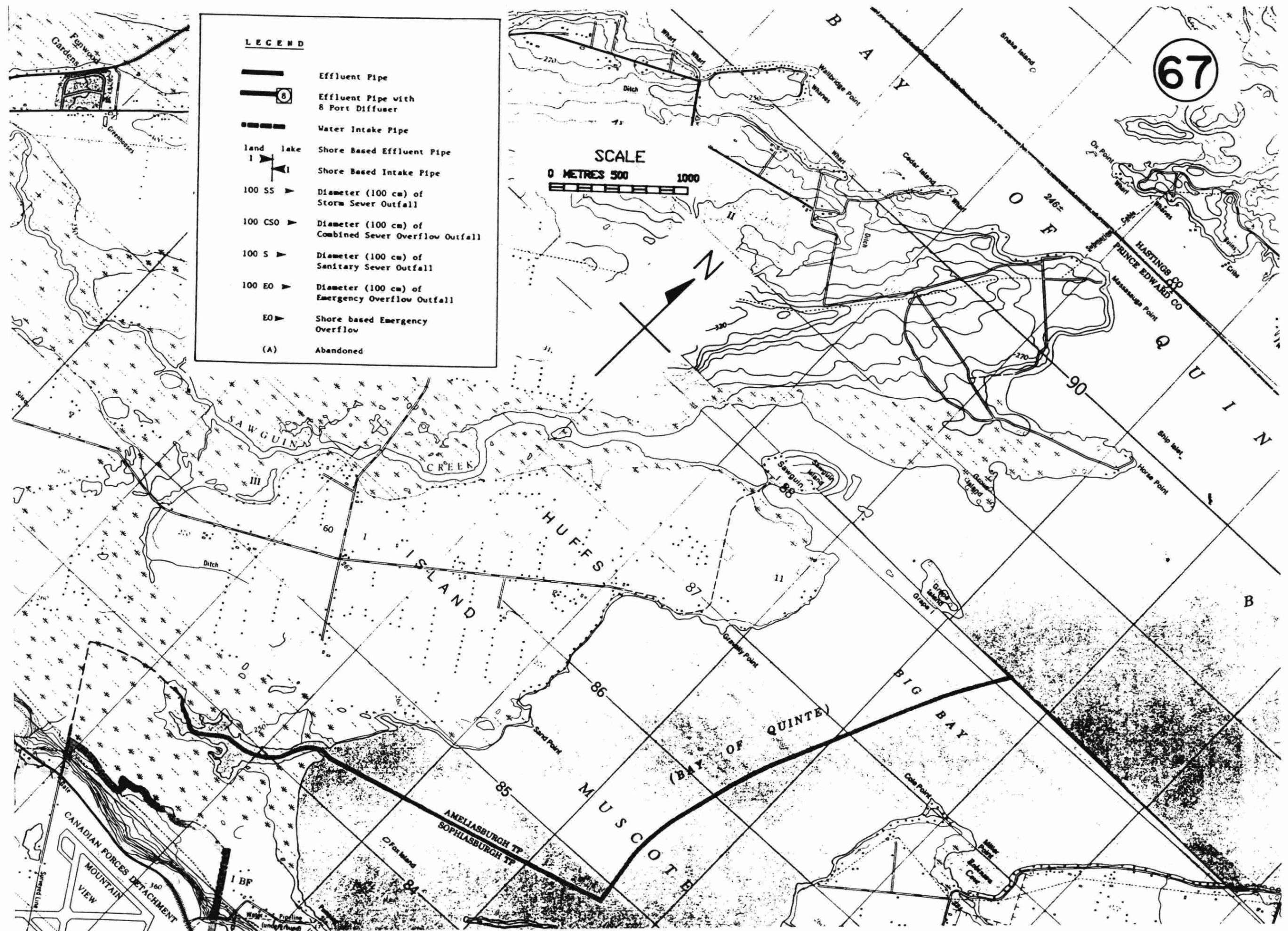
Name	Point Anne WTP						
Intake/Outfall	Intake						
UNIS/INIS No.	220004359						
Structure No.	1						
Map Number	64						
Operating Authority	MUN						
Location	Point Anne Water Corp.						
Supplier/Receiver	Bay of Quinte						
Point of Discharge							
Terminal Basin	Lake Ontario						
Activity	Potable Water Treatment						
Process Type	Physical and Chemical Treatment						
Supply/Discharge Type	Batch (12 hours per day)						
Treatment Type	Filtration, Flocculation and Chlorination						
Comments							
Design Flow (1000m3/day)	0.10						
Mean Annual Flow (1000m3/day)	0.04						
Pipe length from shore (m)	122.00						
Pipe Diameter (cm)	7.60						
Water Depth at end of pipe (m)	4.60						
Water depth above end of pipe (m)	4.60						
Diffuser							
Number of ports							

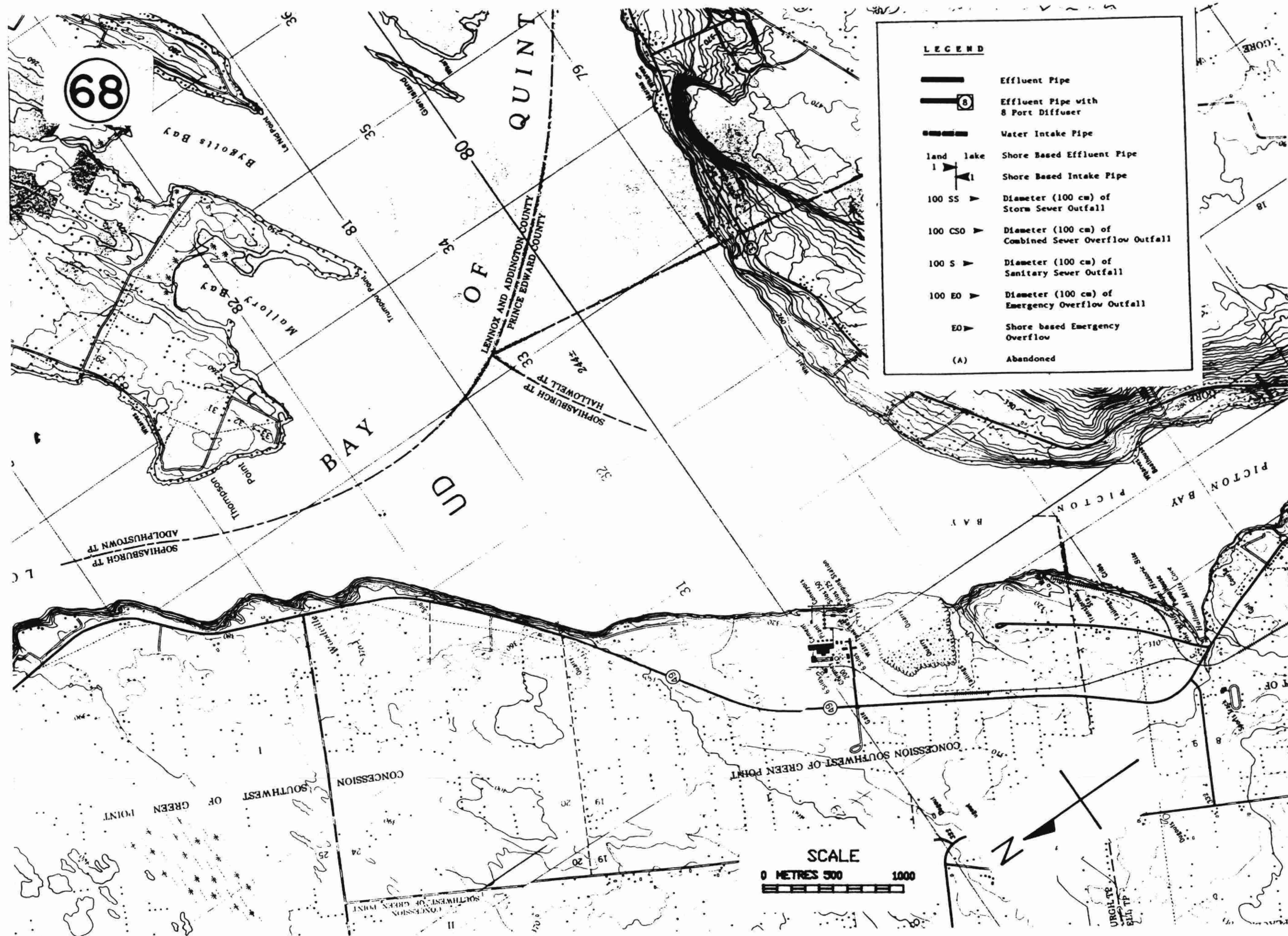




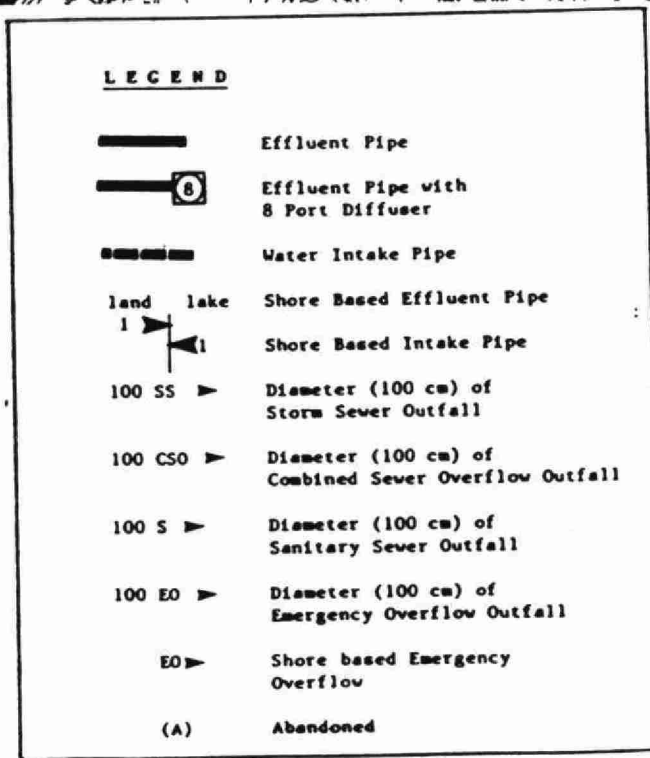
Name	CFB Mountainview WTP						
Intake/Outfall	Intake						
UNIS/INIS No.	NA						
Structure No.	1						
Map Number	66						
Operating Authority	DND						
Location	Mountainview						
Supplier/Receiver	Muscote Bay						
Point of Discharge							
Terminal Basin	Lake Ontario						
Activity	Water Treatment						
Process Type	Physical and Chemical						
Supply/Discharge Type	Continuous						
Treatment Type	Filtration, coagulation flocculation and chlorination						
Comments							
Design Flow (1000m3/day)	NA						
Mean Annual Flow (1000m3/day)	21.00						
Pipe length from shore (m)	83.00						
Pipe Diameter (cm)	25.00						
Water Depth at end of pipe (m)	2.50						
Water depth above end of pipe (m)	NA						
Diffuser							
Number of ports							

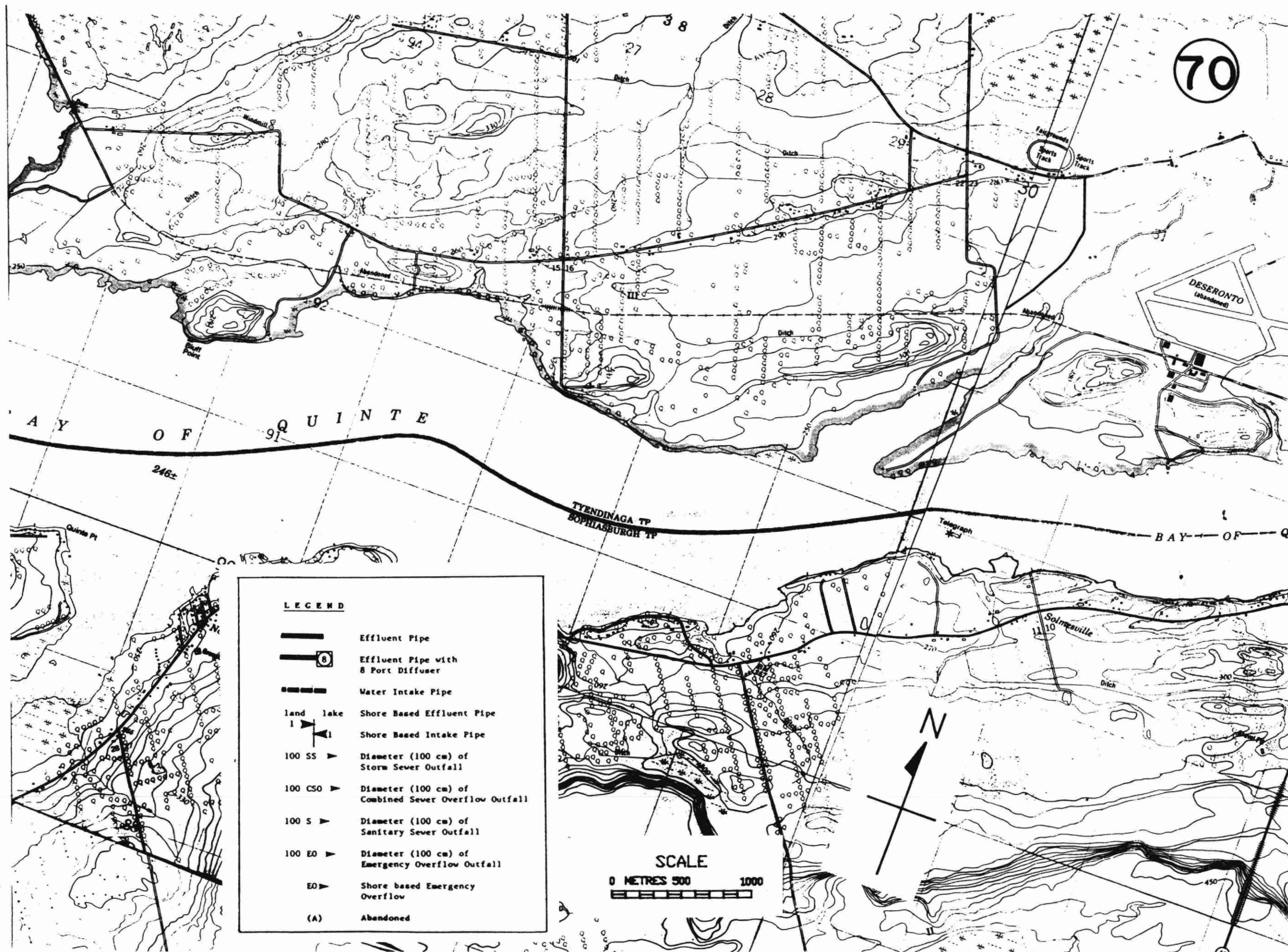




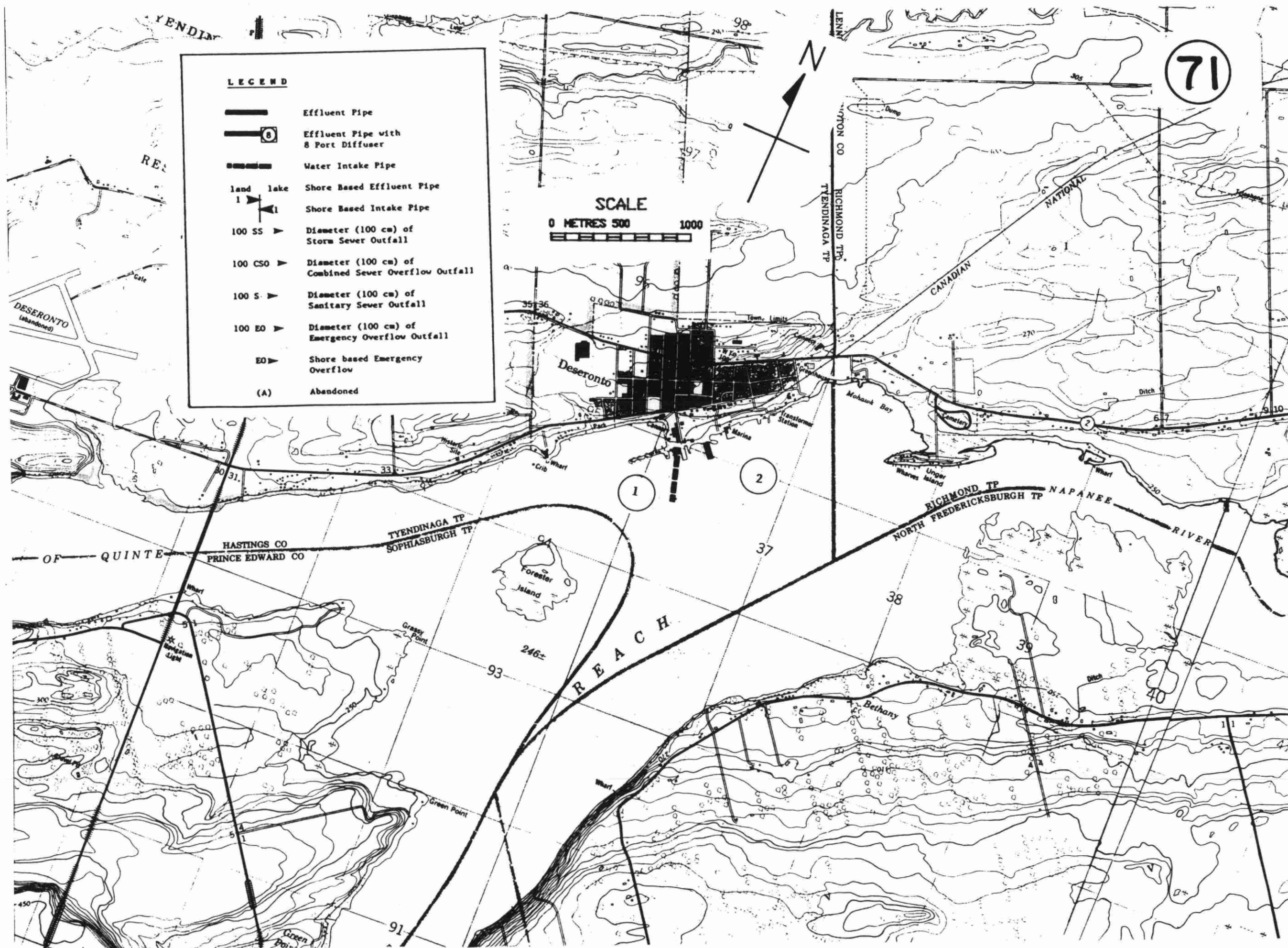


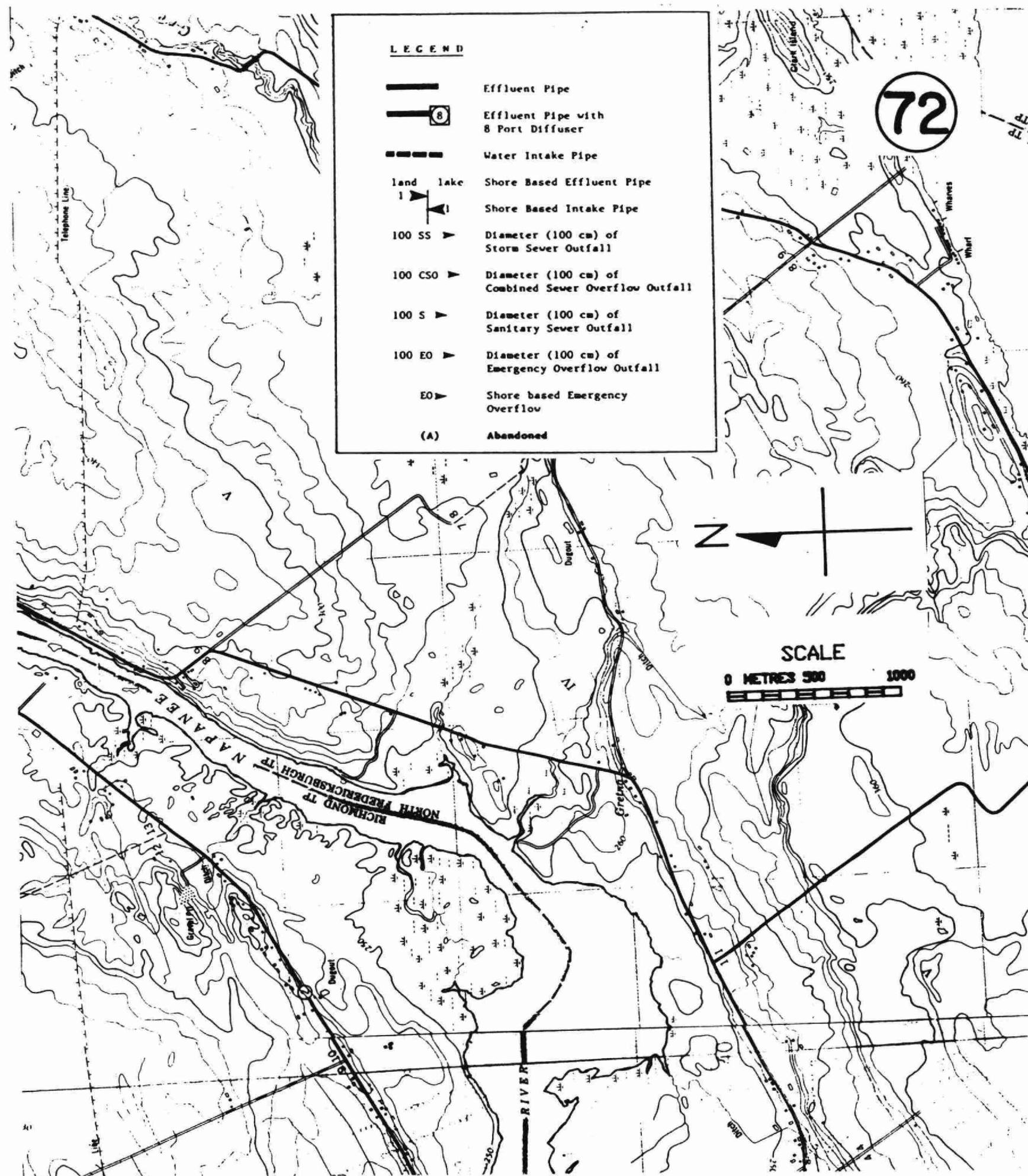
Name	Lake Ontario Cement	Lake Ontario Cement	Picton STP	Picton WTP	Prince Edward Hgts. WPCP		
Intake/Outfall	Intake	Outfall	Outfall	Intake	Outfall		
UMIS/IMIS No.	NA	NA	120000667	220000987	NA		
Structure No.	1	2	3	4	5		
Map Number	69	69	69	69	69		
Operating Authority	IND	IND	MUN	MUN PUC	MGS		
Location	Picton	Picton	Picton	Picton	Picton		
Supplier/Receiver	Picton Bay	Picton Bay	Picton Bay	Picton Bay	Marsh Creek		
Point of Discharge		Embayment	River Mouth		River Mouth		
Terminal Basin	Lake Ontario	Lake Ontario	Lake Ontario	Lake Ontario	Lake Ontario		
Activity	Cement Manufacturing	Cement Manufacturing	Municipal Sewage Treatment	Municipal Water Treatment	Municipal Sewage Treatment		
Process Type	Crushing, Grinding Pyro-processing Cement types MP6 and D6	Crushing, Grinding Pyro-processing Cement types MP6 and D6	Secondary Treatment	Physical and Chemical Treatment	Secondary Treatment		
Supply/Discharge Type	Continuous	Continuous	Continuous	Continuous	NA		
Treatment Type	Chlorination	Cooling water - Nil Sanitary- Anerobic Digester, end point Chlorination	Activated Sludge, Contact Stabilization P Removal-Continuous Chlorination	Coagulation, Filtration Chlorination and Fluoridation	Primary and Secondary Clarification, Trickling Filter, Anaerobic Digestion, Chlorination		
Comments	Intake is through a channel of unknown dia.	Effluent cascades off Bluff 10 metres to Picton Bay					
Design Flow (1000m3/day)	15.80	15.80	4.50	9.10	NA		
Mean Annual Flow (1000m3/day)	14.00	14.10	3.50	3.70	NA		
Pipe length from shore (m)	0.00	0.00	0.00	77.00	0.00		
Pipe Diameter (cm)	NA	107.00	30.00	40.00	NA		
Water Depth at end of pipe (m)	3.05	NA	1.00	1.80	NA		
Water depth above end of pipe (m)	NA	NA	0.00	1.70	NA		
Diffuser		NO			NO		
Number of ports							





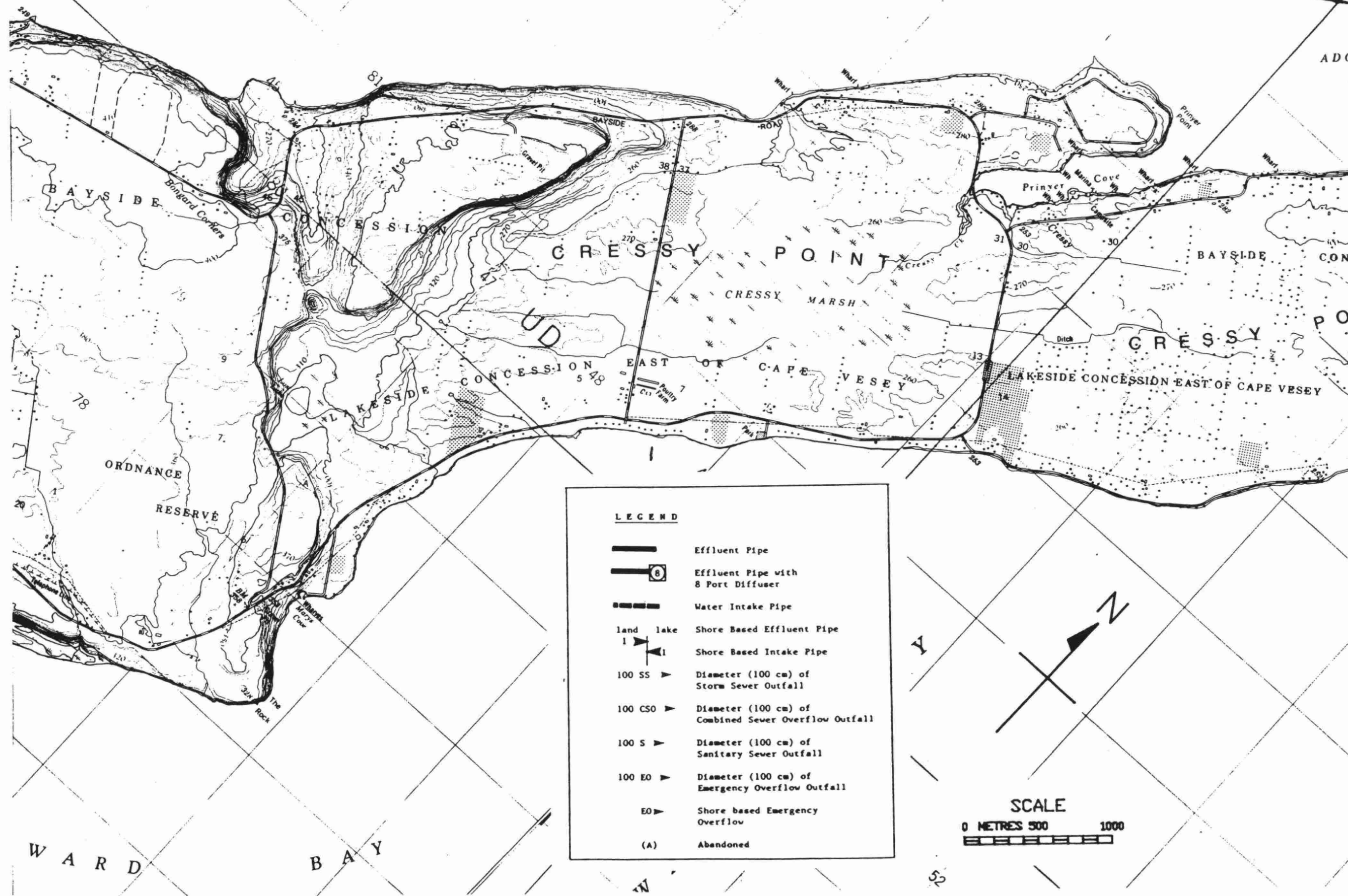
Name	Deseronto WTP	Deseronto WPCP					
Intake/Outfall	Intake	Outfall					
UMIS/IMIS No.	220001593	110000980					
Structure No.	1	2					
Map Number	71	71					
Operating Authority	MOE	MOE					
Location	Deseronto	Deseronto					
Supplier/Receiver	Bay of Quinte	Bay of Quinte					
Point of Discharge		Embayment					
Terminal Basin	Lake Ontario	Lake Ontario					
Activity	Municipal Water Treatment	Municipal Sewage Treatment					
Process Type	Physical and Chemical Treatment	Secondary Treatment					
Supply/Discharge Type	Batch	Continuous					
Treatment Type	Sand and Carbon Filtration, Alum and Chlorination	Activated Sludge Extended Aeration Chlorination					
Comments	Water is drawn in as required to maintain level in Standpipe						
Design Flow (1000m3/day)	2.95	1.36					
Mean Annual Flow (1000m3/day)	1.27	1.01					
Pipe length from shore (m)	487.00	90.00					
Pipe Diameter (cm)	40.60	45.70					
Water Depth at end of pipe (m)	19.00	2.90					
Water depth above end of pipe (m)	18.48	2.40					
Diffuser		NO					
Number of ports							

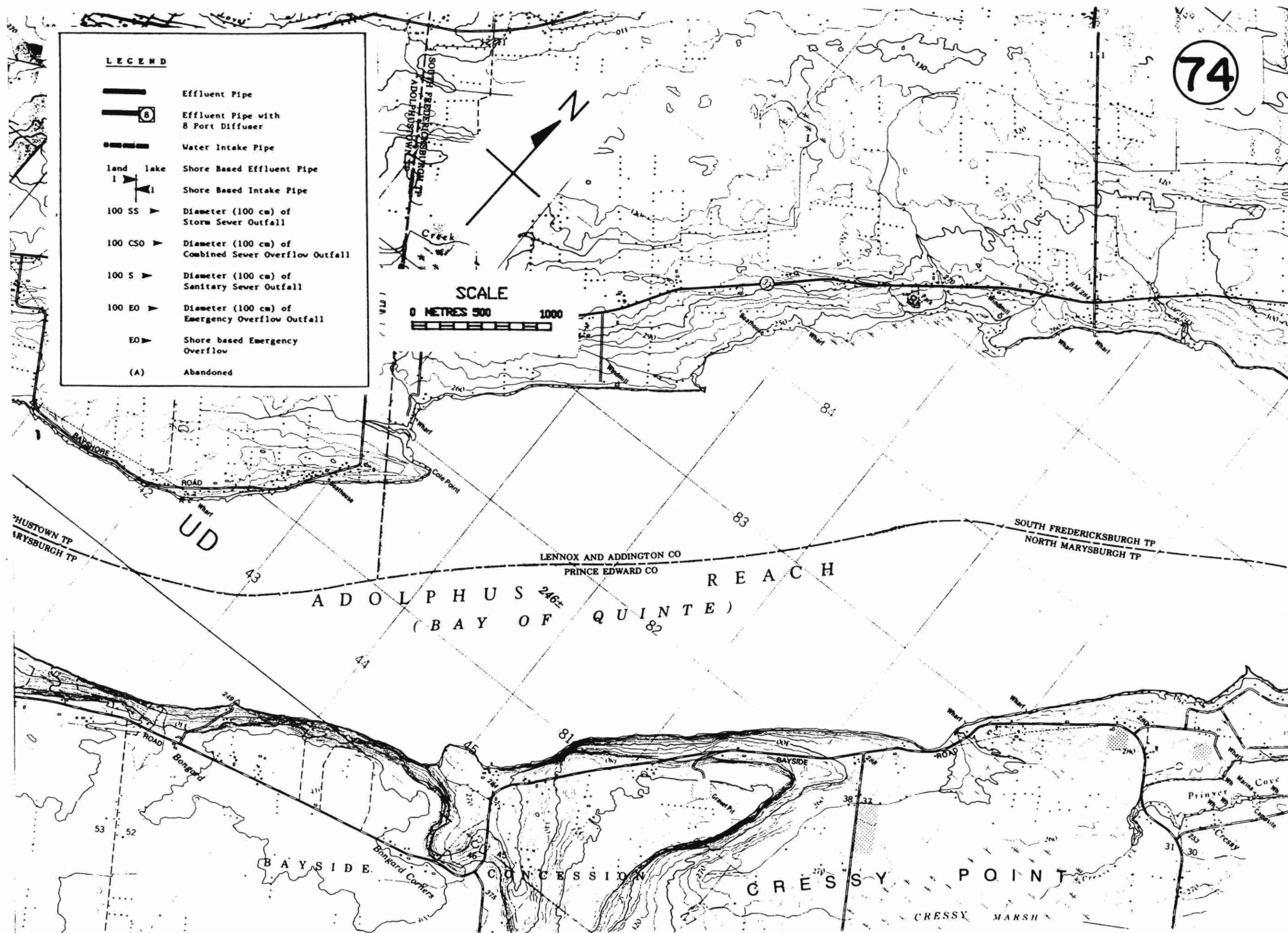




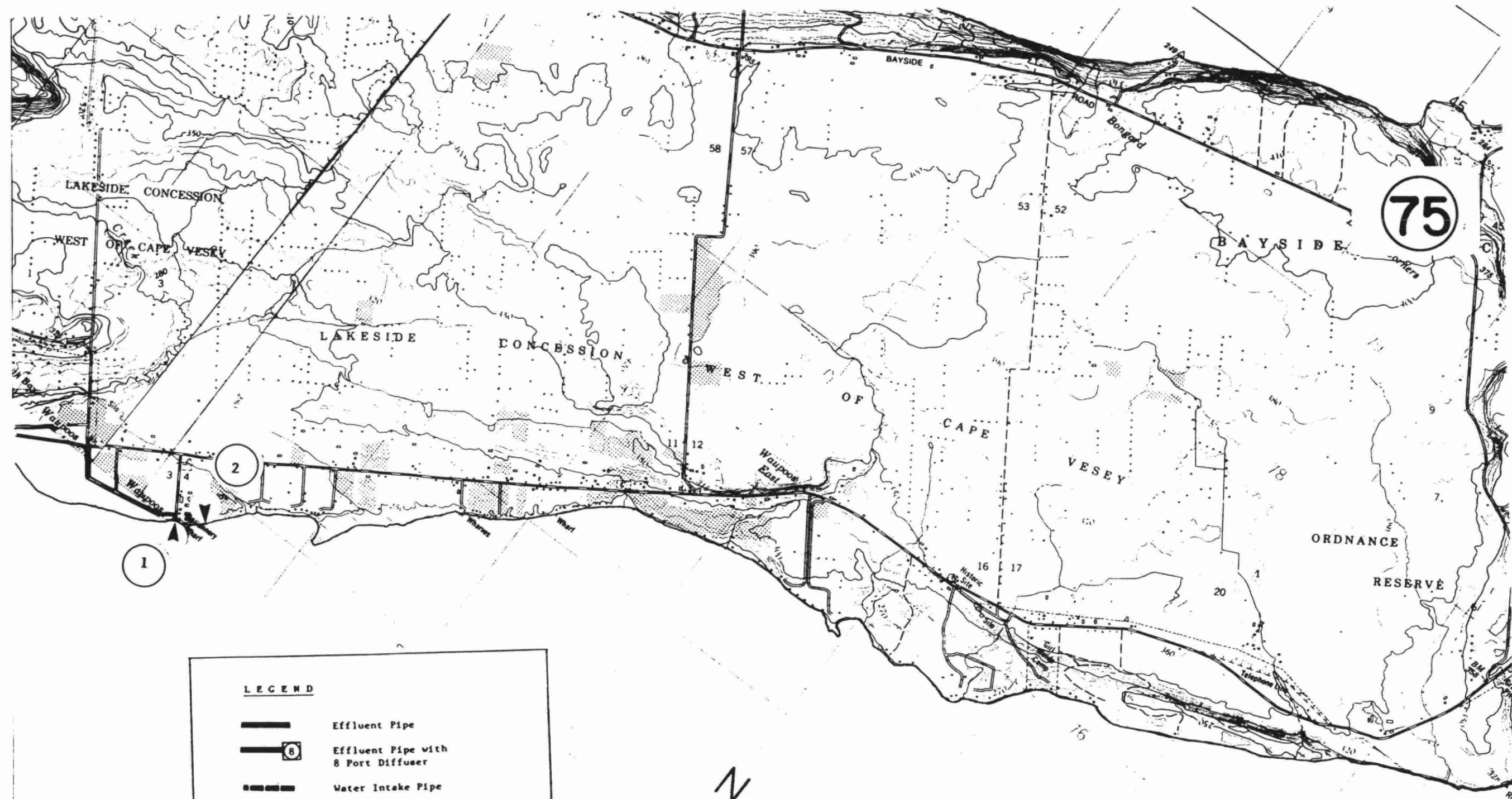
~~WILKESBOROUGH TP~~
~~NORTH MARYSBURGH TP~~

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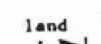


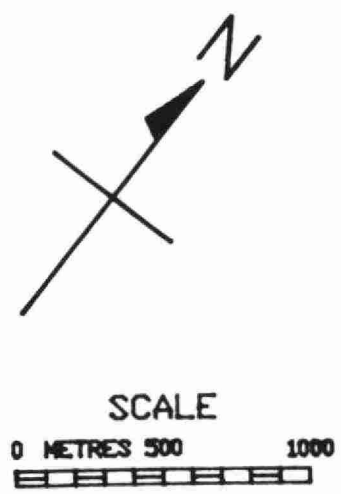


Name	Waupoos Canning Co. Ltd.	Waupoos Canning Co. Ltd.				
Intake/Outfall	Intake	Outfall				
UMIS/INIS No.	NA	NA				
Structure No.	1	2				
Map Number	75	75				
Operating Authority	IND	IND				
Location	N. Marysburg TWP	N. Marysburg TWP				
Supplier/Receiver	Lake Ontario	Lake Ontario				
Point of Discharge		Shore				
Terminal Basin	Lake Ontario	Lake Ontario				
Activity	Food Processing	Food Processing				
Process Type	Vegetable processing and Canning	Vegetable processing and Canning				
Supply/Discharge Type	Seasonal	Seasonal				
Treatment Type	Chlorination	2 lagoons; 1 lined and settling 1 aerated for discharge				
Comments	Plant operates from June 25 to October 1 during which discharge is Continuous	Plant operates from June 25 to October 1 during which discharge is Continuous				
Design Flow (1000m3/day)	0.14	0.10				
Mean Annual Flow (1000m3/day)	0.10	0.08				
Pipe length from shore (m)	3.70	0.00				
Pipe Diameter (cm)	12.50	45.00				
Water Depth at end of pipe (m)	3.00	0.00				
Water depth above end of pipe (m)	2.00	0.00				
Diffuser		NO				
Number of ports						

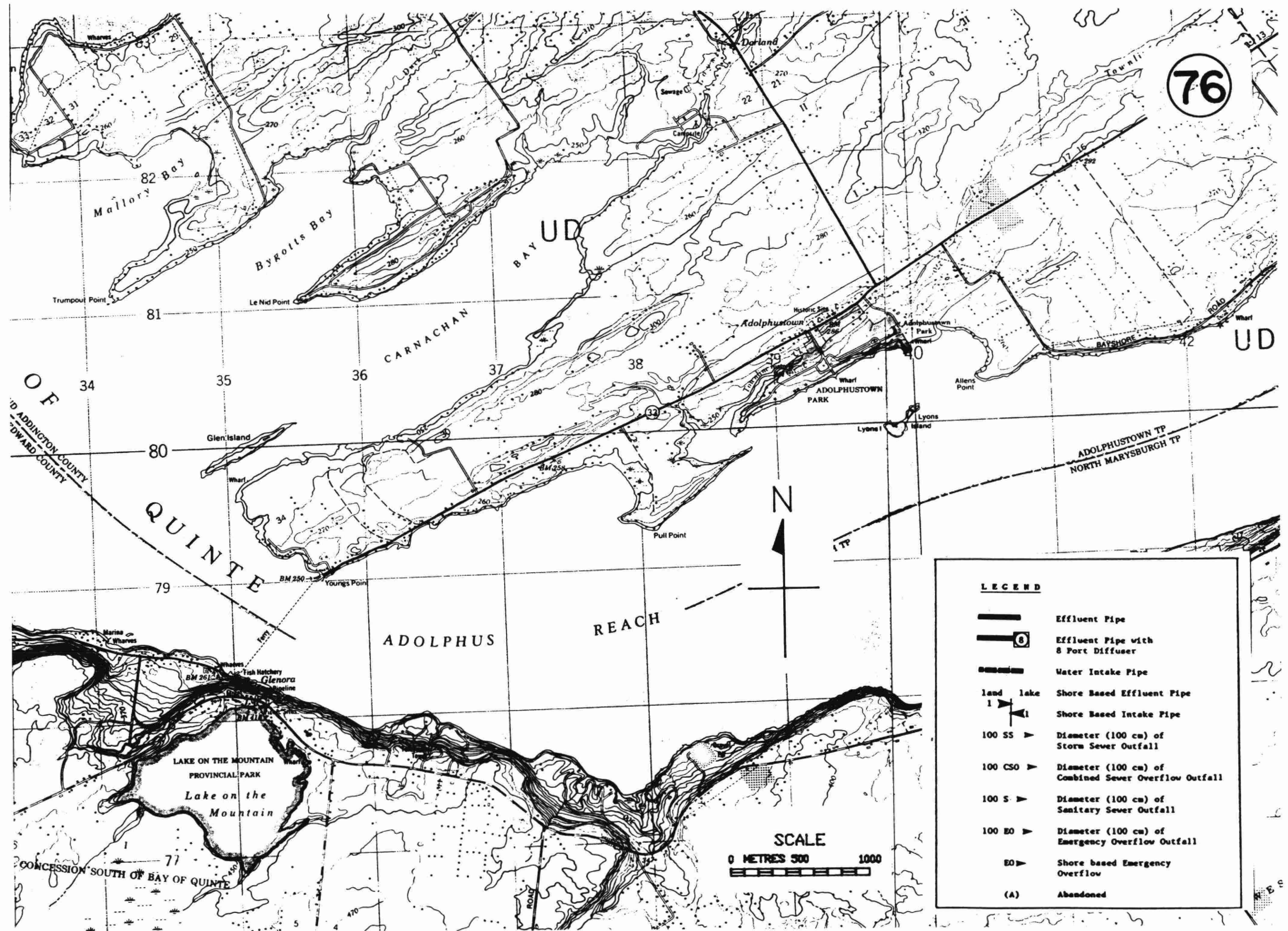


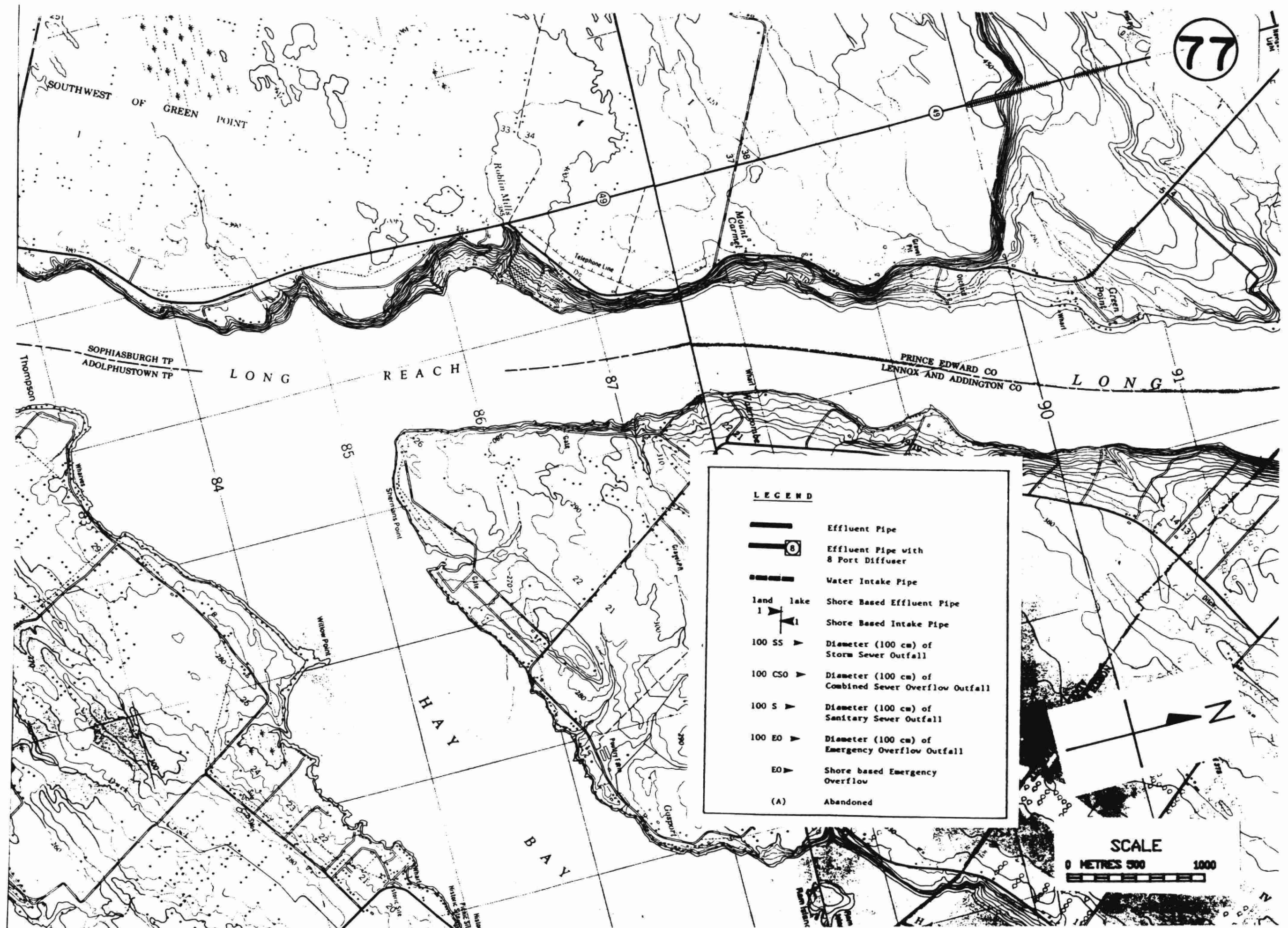
LEGEND

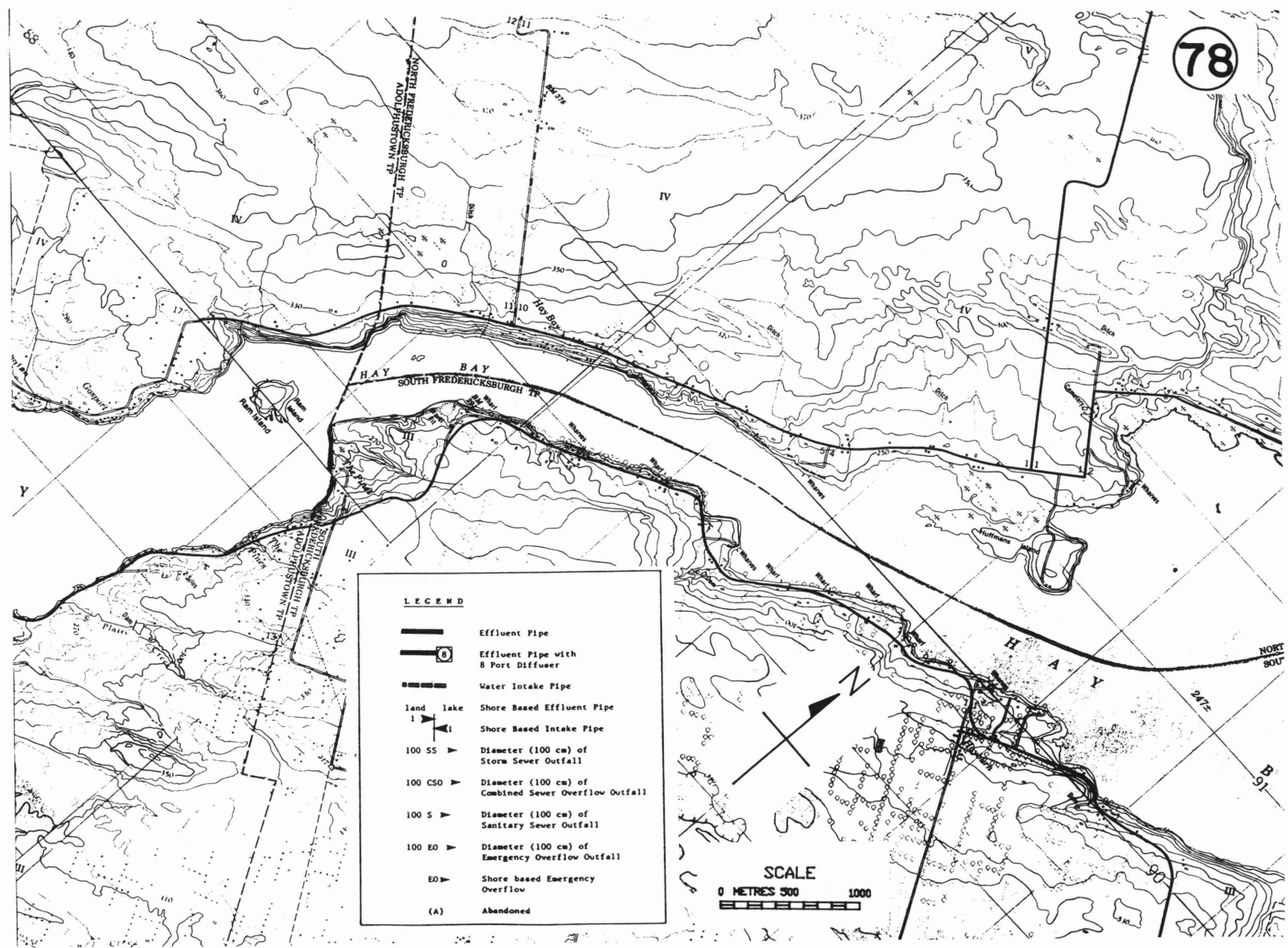
-  Effluent Pipe
-  Effluent Pipe with 8 Port Diffuser
-  Water Intake Pipe
- land lake  Shore Based Effluent Pipe
- land lake  Shore Based Intake Pipe
- 100 SS  Diameter (100 cm) of Storm Sever Outfall
- 100 CSO  Diameter (100 cm) of Combined Sever Overflow Outfall
- 100 S  Diameter (100 cm) of Sanitary Sever Outfall
- 100 EO  Diameter (100 cm) of Emergency Overflow Outfall
- EO  Shore based Emergency Overflow
- (A)  Abandoned



PRINCE EDWARD
(LAKE ONTARIO)



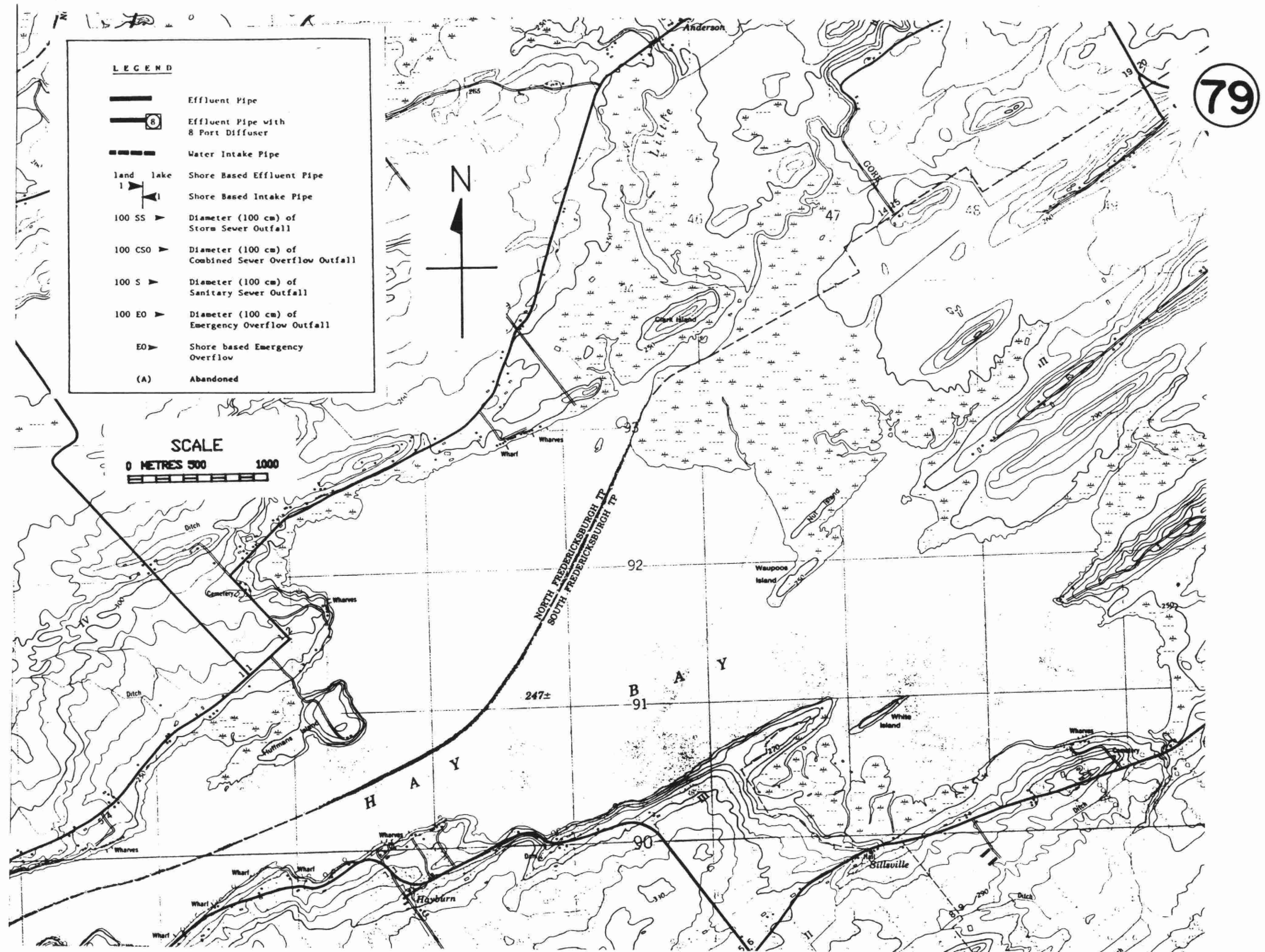


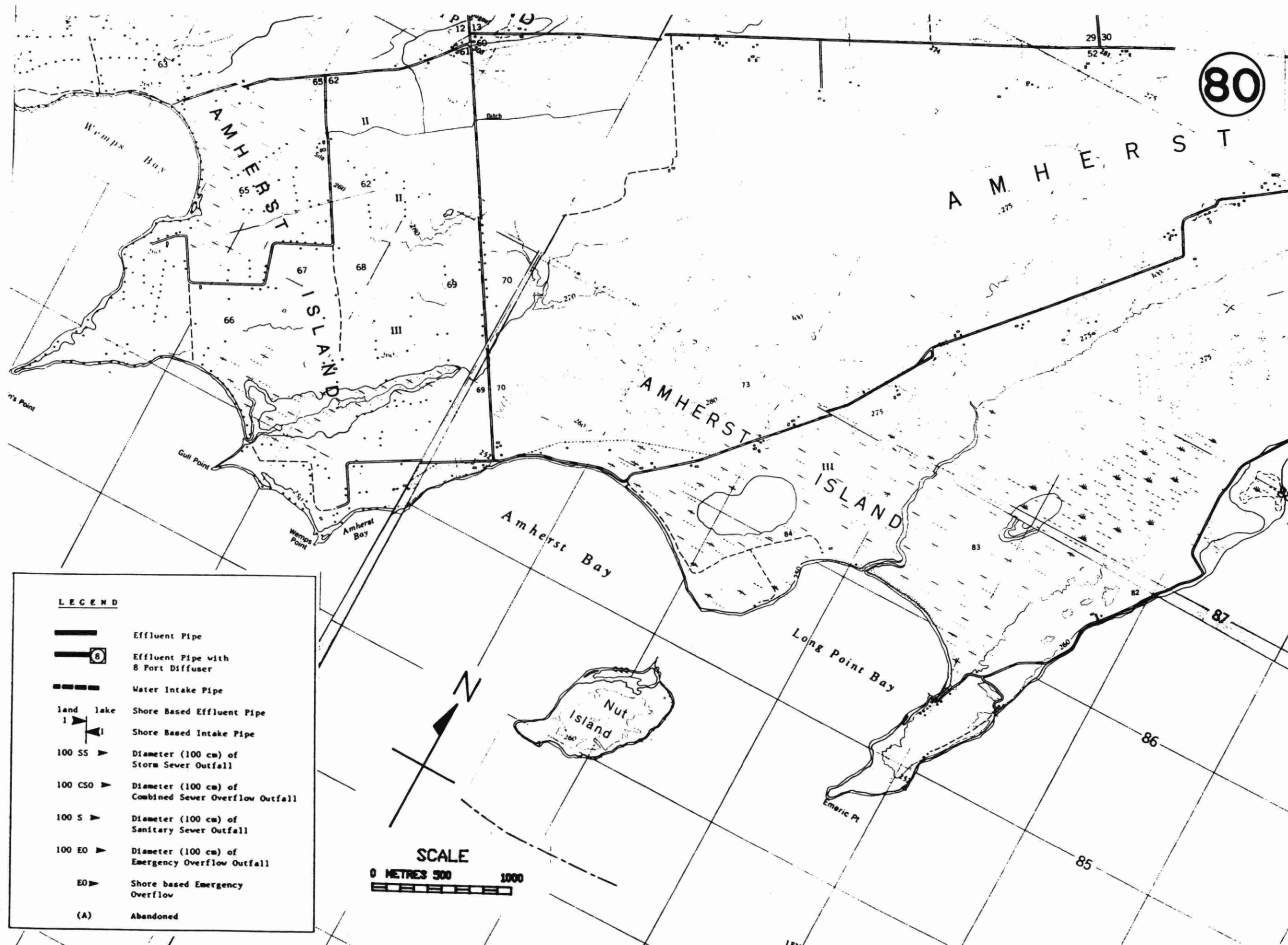


LEGEND

- Effluent Pipe
- Effluent Pipe with 8 Port Diffuser
- Water Intake Pipe
- Shore Based Effluent Pipe
- Shore Based Intake Pipe
- 100 SS > Diameter (100 cm) of Storm Sewer Outfall
- 100 CSO > Diameter (100 cm) of Combined Sewer Overflow Outfall
- 100 S > Diameter (100 cm) of Sanitary Sewer Outfall
- 100 EO > Diameter (100 cm) of Emergency Overflow Outfall
- EO > Shore based Emergency Overflow
- (A) Abandoned

SCALE
0 METRES 500 1000



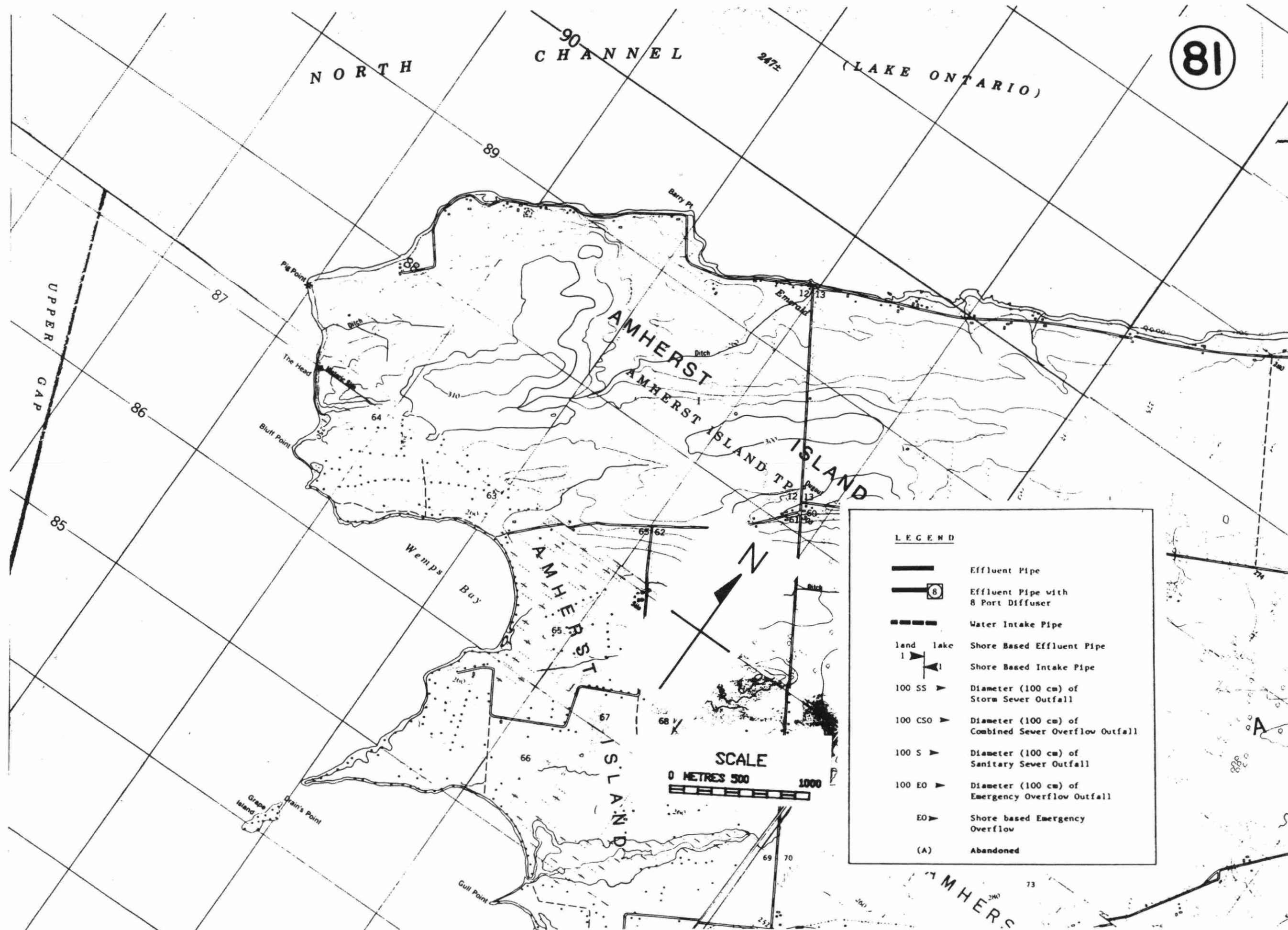


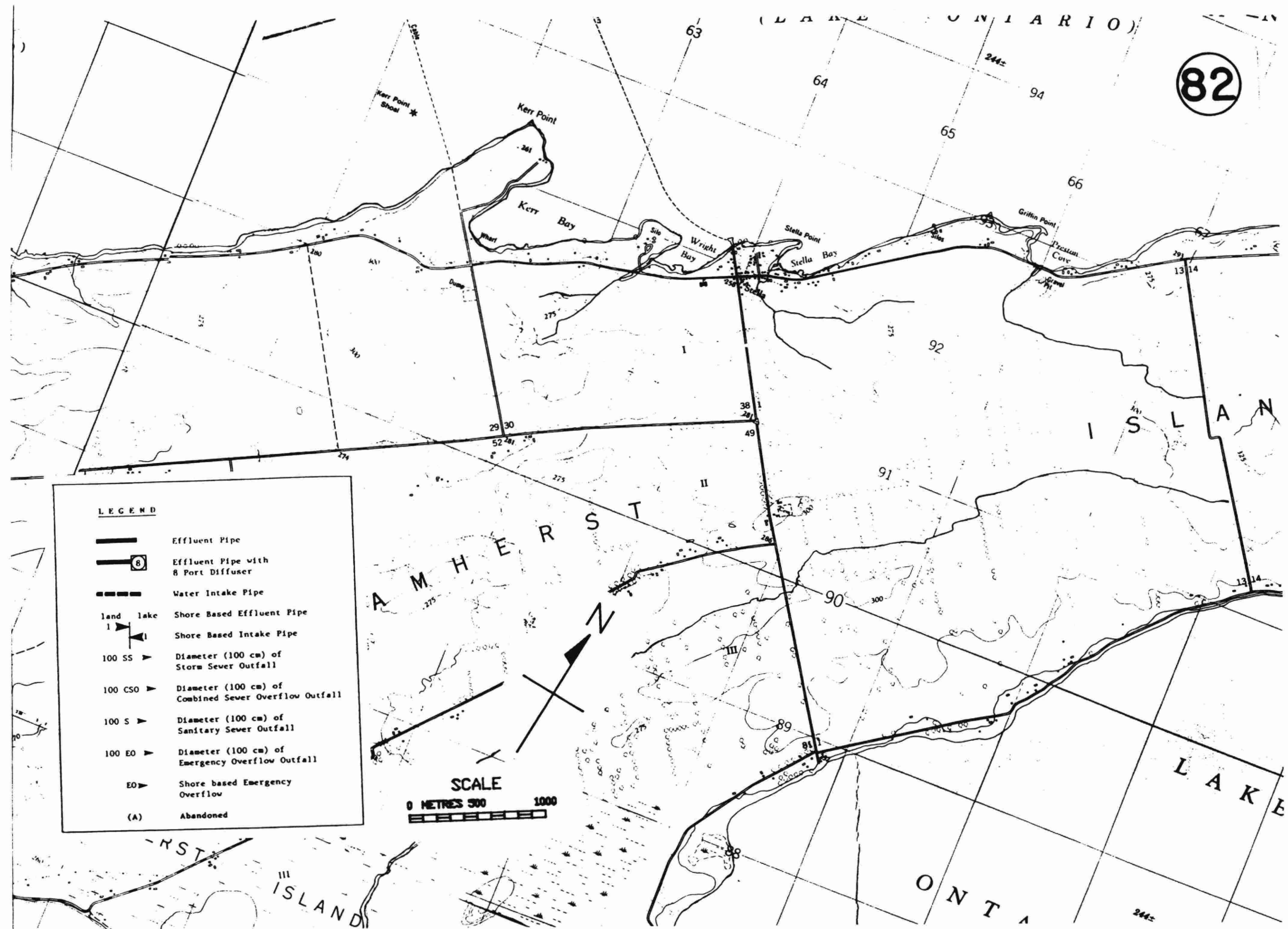
LEGEND

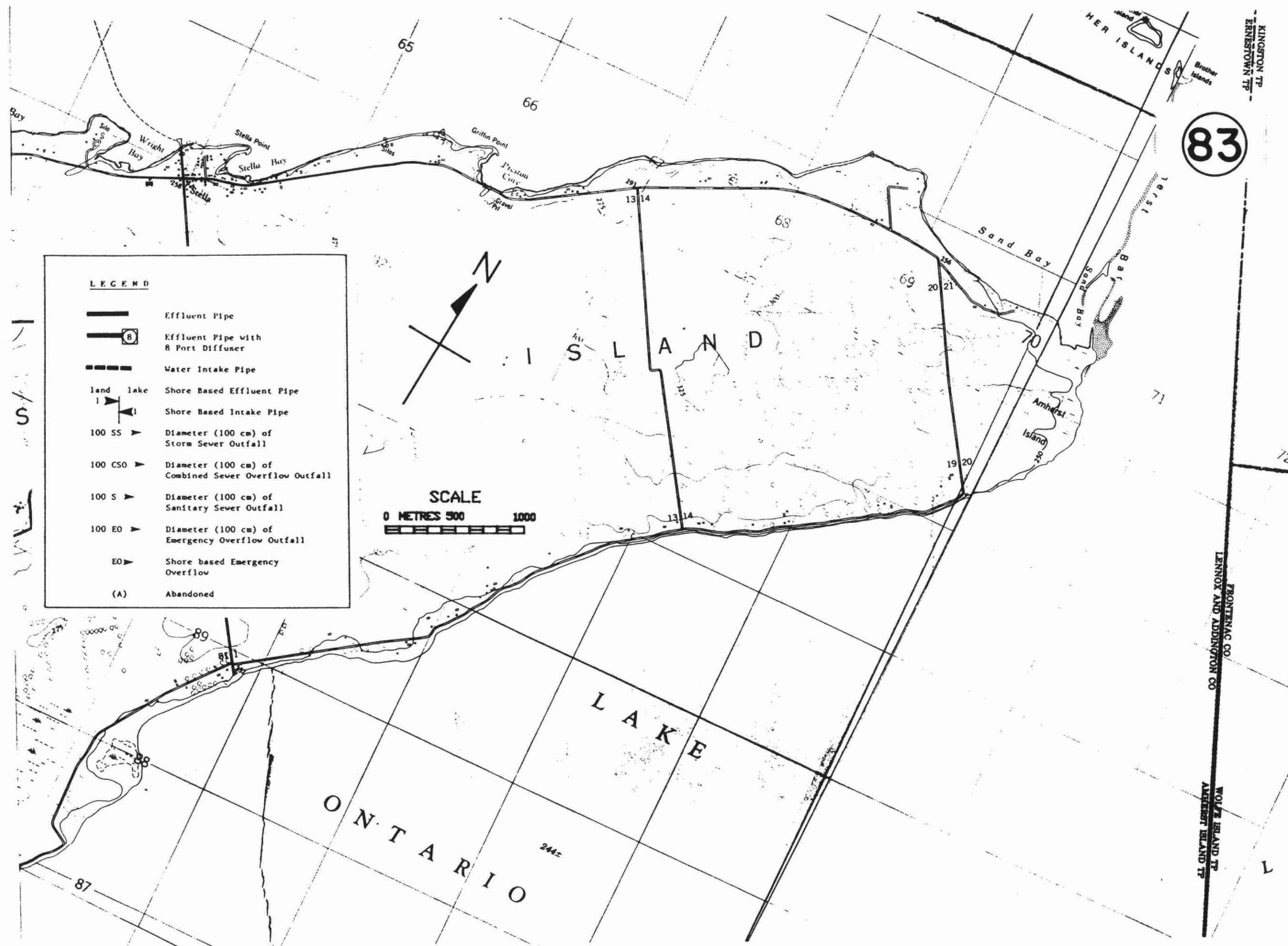
-  Effluent Pipe
-  Effluent Pipe with 8 Port Diffuser
-  Water Intake Pipe
-  Shore Based Effluent Pipe
-  Shore Based Intake Pipe
-  Diameter (100 cm) of Storm Sewer Outfall
-  Diameter (100 cm) of Combined Sewer Overflow Outfall
-  Diameter (100 cm) of Sanitary Sewer Outfall
-  Diameter (100 cm) of Emergency Overflow Outfall
-  Shore based Emergency Overflow
-  Abandoned

SCALE

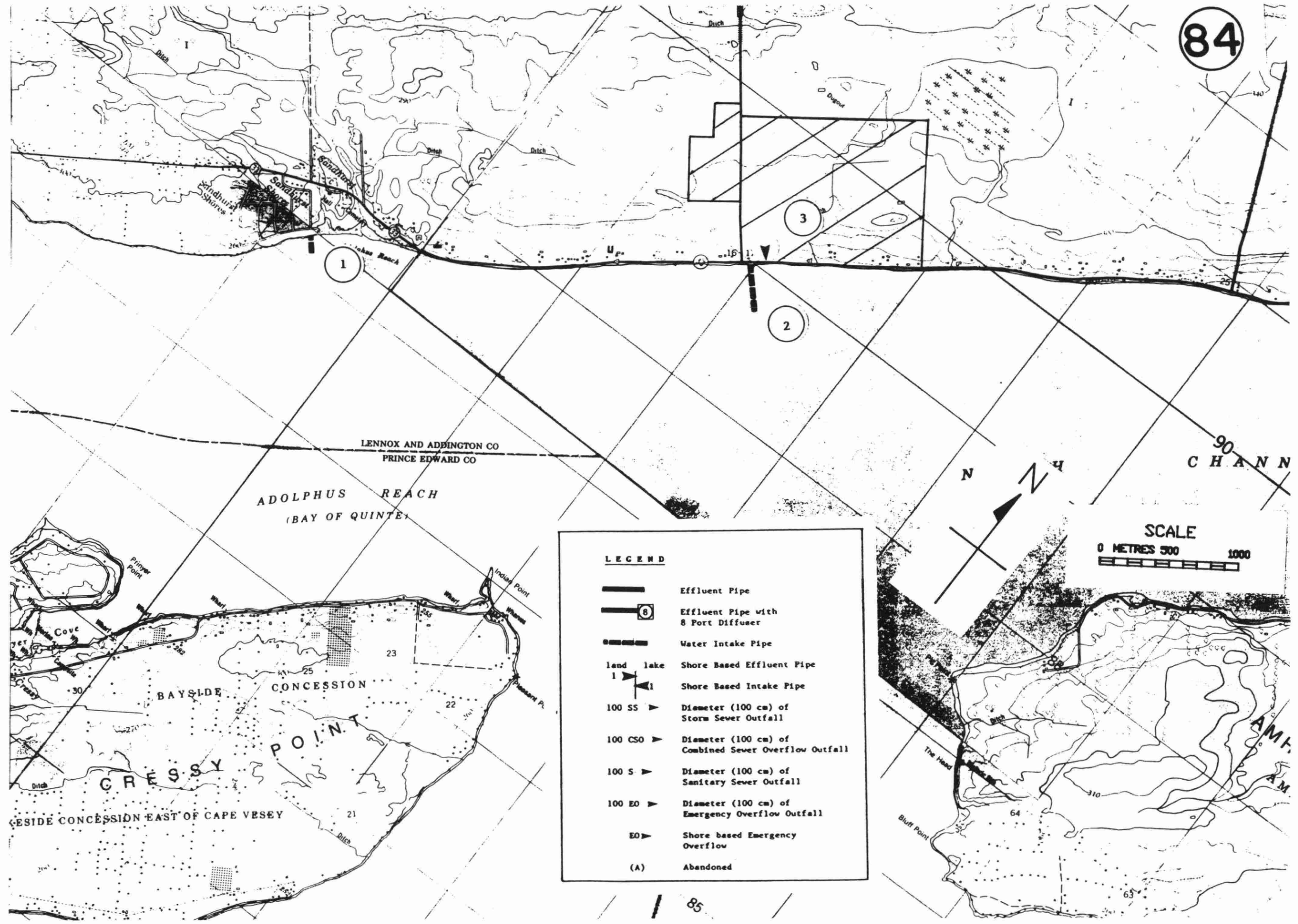
0 METRES 500 1000







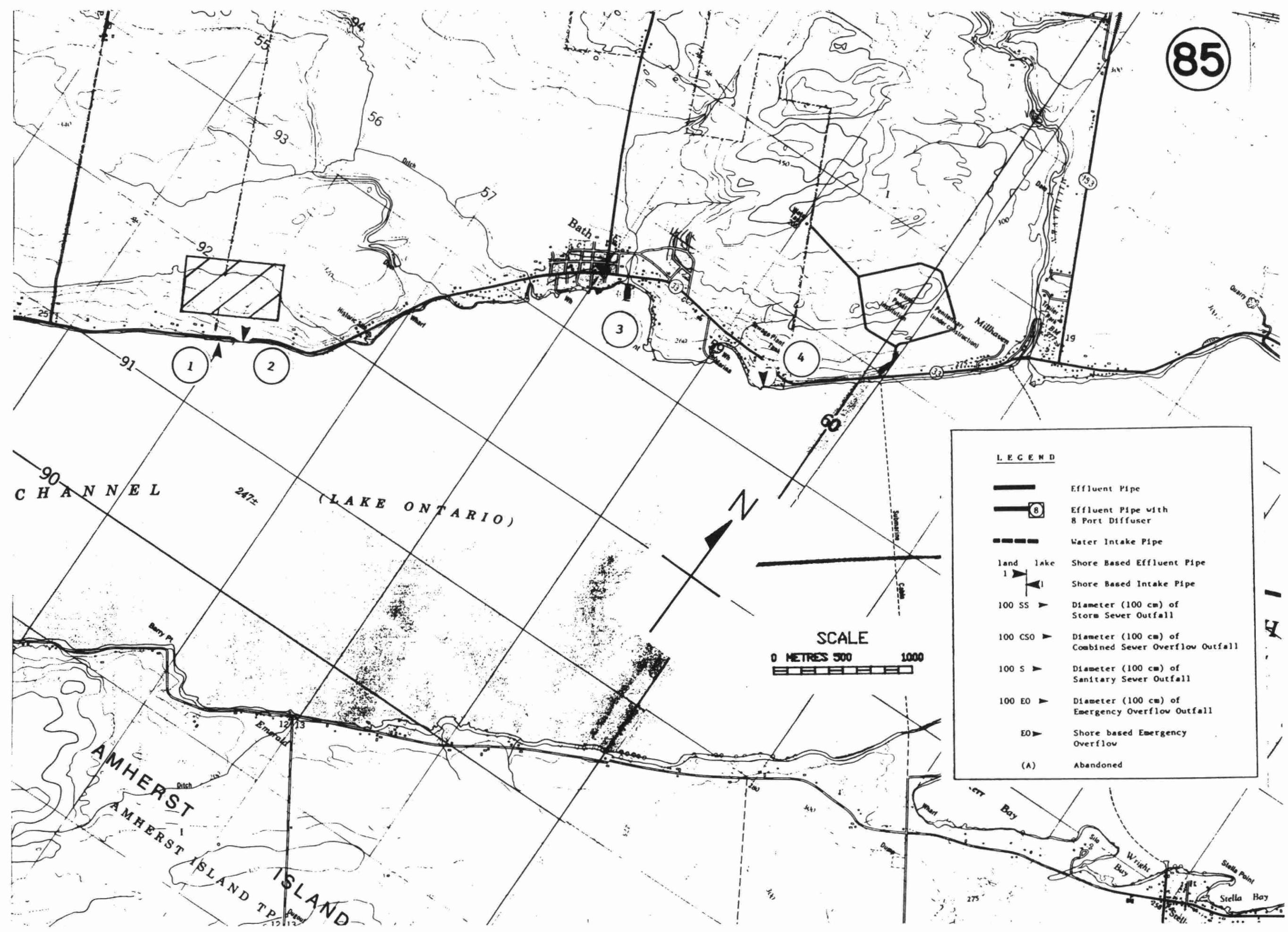
Name	Sandhurst Shores WTP	Lennox TGS	Lennox TGS				
Intake/Outfall	Intake	Intake	Outfall				
UMIS/INIS No.	220003877	NA	NA				
Structure No.	1	2	3				
Map Number	84	84	84				
Operating Authority	MUN	Ontario Hydro	Ontario Hydro				
Location	Sandhurst Shores	Bath	Bath				
Supplier/Receiver	Adolphus Reach	Adolphus Reach	Adolphus Reach				
Point of Discharge			Shore				
Terminal Basin	Lake Ontario	Lake Ontario	Lake Ontario				
Activity	Municipal Water Treatment	Electrical Generating Station	Electrical Generating Station				
Process Type	Chemical Treatment	Coal Fired Thermal Generation	Coal Fired Thermal Generation				
Supply/Discharge Type	Continuous	Designed to be Continuous	Designed to be Continuous				
Treatment Type	Chlorination	Bar Racks & Vertical travelling screens for the once through cooling water only	Bar Racks & Vertical travelling screens for the once through cooling water only				
Comments	No Metering of water flow	Plant Mouthballed after construction completion in the early 1970's	Plant Mouthballed after construction completion in the early 1970's				
Design Flow (1000m3/day)	NA	5529.60	5529.60				
Mean Annual Flow (1000m3/day)	NA	0.00	0.00				
Pipe length from shore (m)	114.30	272.00	0.00				
Pipe Diameter (cm)	7.62	600.00	760.00				
Water Depth at end of pipe (m)	5.48	20.40	11.00				
Water depth above end of pipe (m)	5.48	11.00	0.00				
Diffuser			NO				
Number of ports							



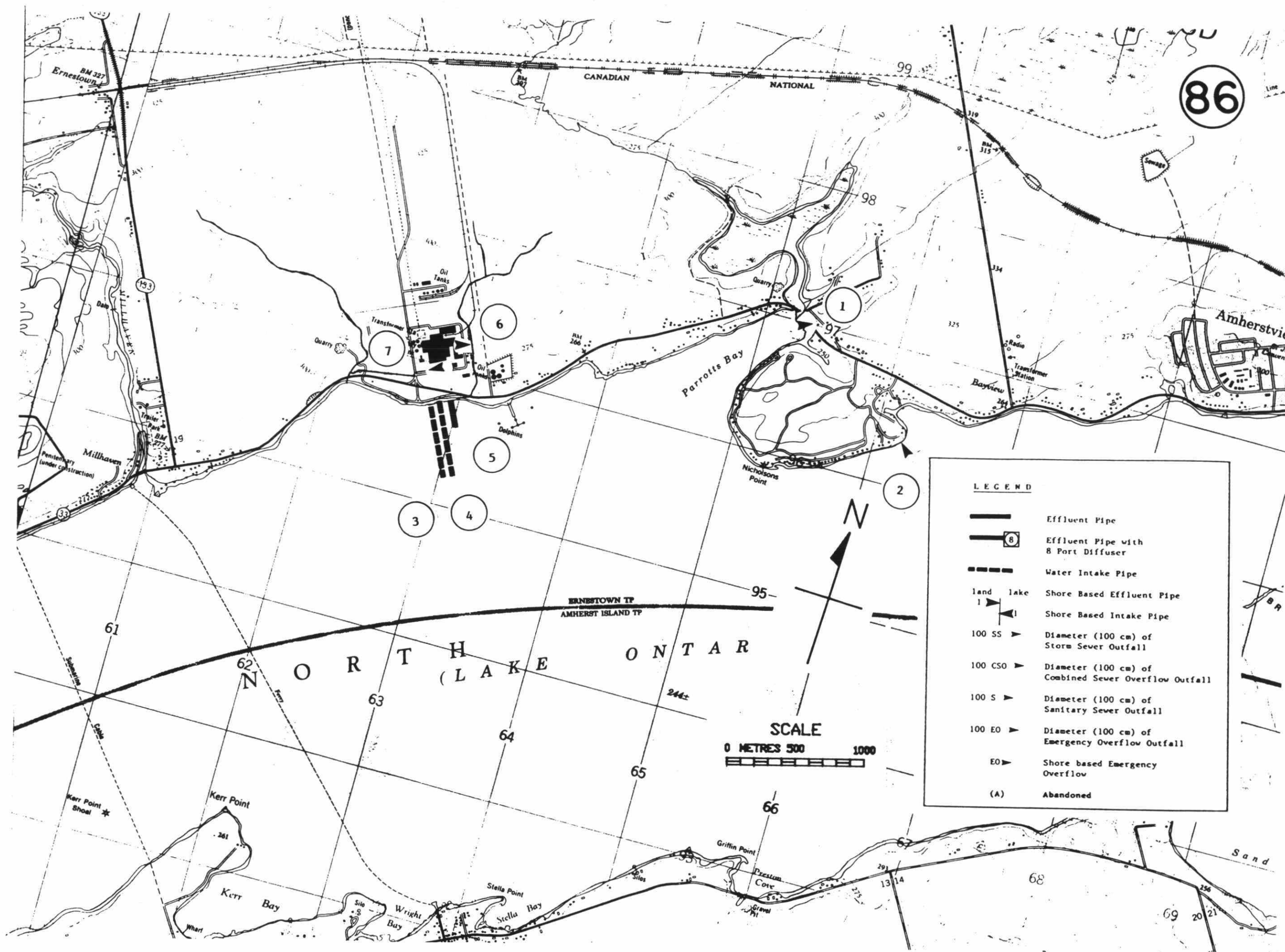
LEGEND

- Effluent Pipe
- Effluent Pipe with 8 Port Diffuser
- Water Intake Pipe
- Shore Based Effluent Pipe
- Shore Based Intake Pipe
- Diameter (100 cm) of Storm Sewer Outfall
- Diameter (100 cm) of Combined Sewer Overflow Outfall
- Diameter (100 cm) of Sanitary Sewer Outfall
- Diameter (100 cm) of Emergency Overflow Outfall
- Shore based Emergency Overflow
- Abandoned

Name	Canada Cement LaFarge Ltd	Canada Cement LaFarge Ltd	Bath WTP	Bath WPCP			
Intake/Outfall	Intake	Outfall	Intake	Outfall			
UMIS/IMIS No.	NA	NA	220002217	120000177			
Structure No.	1	2	3	4			
Map Number	85	85	85	85			
Operating Authority	IND	IND	MUN	MUN			
Location	Bath	Bath	Bath	Bath			
Supplier/Receiver	North Channel	North Channel	North Channel	North Channel			
Point of Discharge		Shore		Shore			
Terminal Basin	Lake Ontario	Lake Ontario	Lake Ontario	Lake Ontario			
Activity	Cement Production	Cement Production	Municipal Water Treatment	Municipal Sewage Treatment			
Process Type	Cement and Portland	Cement and Portland	Physical and Chemical	Secondary Treatment			
Supply/Discharge Type	Continuous	Continuous	Continuous	Continuous			
Treatment Type	Filtering Screen for cooling water	None	Filtration & Chlorination	Activated Sludge Extended Aeration			
Comments				WPCP also serves Millhaven Penitentiary			
Design Flow (1000m3/day)	8.18	8.18	4.50	1.40			
Mean Annual Flow (1000m3/day)	4.09	4.09	1.20	1.10			
Pipe length from shore (m)	76.20	30.50	76.00	17.00			
Pipe Diameter (cm)	61.00	45.70	4.50	30.00			
Water Depth at end of pipe (m)	3.05	9.15	3.50	3.50			
Water depth above end of pipe (m)	6.10	3.05	3.50	3.00			
Diffuser		NO		NO			
Number of ports							



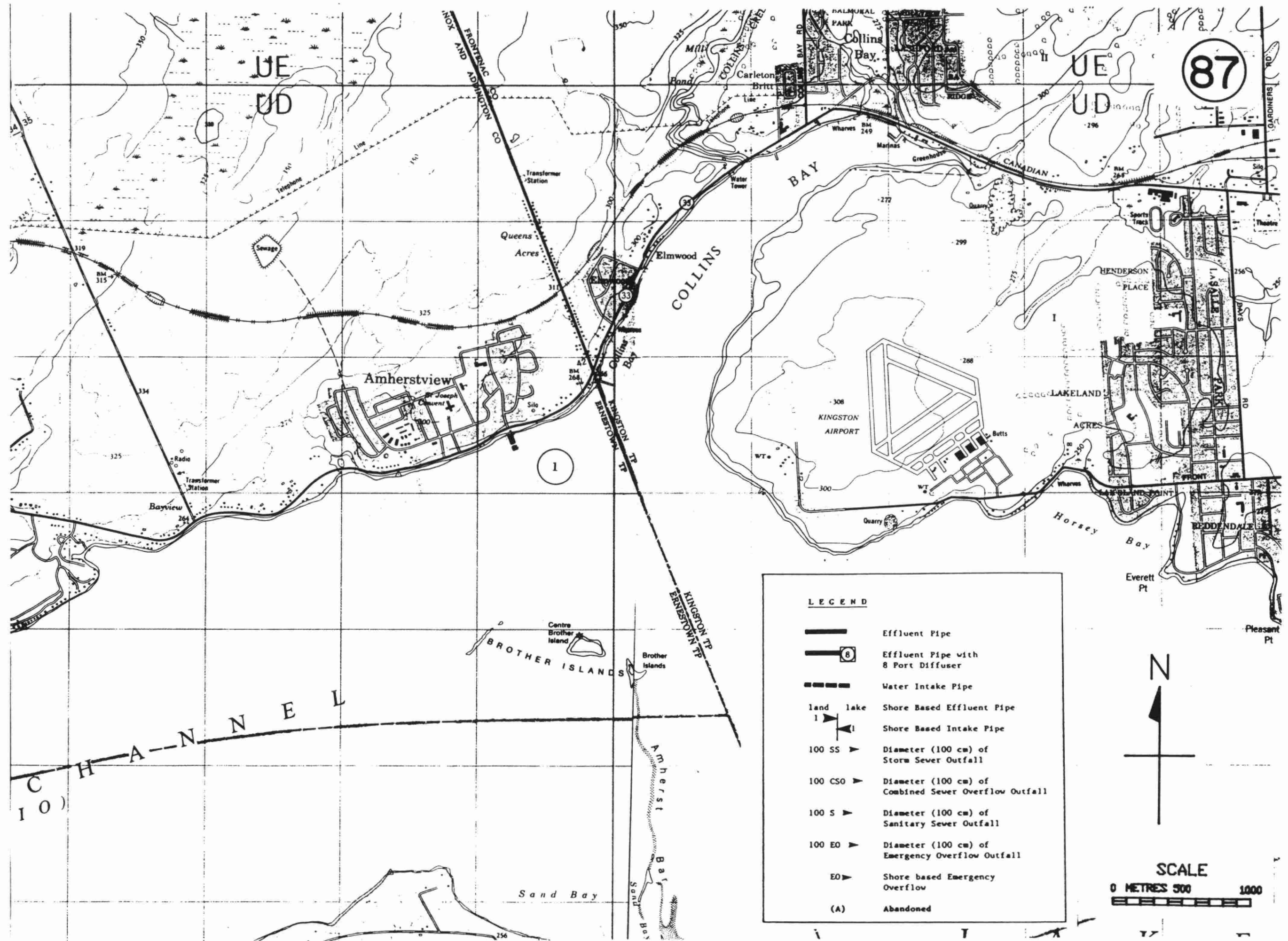
Name	Amherstview WSS	Amherstview WSS	Celanese Canada Inc.	Celanese Canada Inc.	Celanese Canada Inc.	Celanese Canada Inc.	Celanese Canada Inc.
Intake/Outfall	Intake	Intake	Intake #1	Intake #2	Outfall #1	Outfall #2	Outfall #3
UMIS/IMIS No.	220001879	220001879	0001730001	0001730001	0001730001	0001730001	0001730001
Structure No.	1	2	3	4	5	6	7
Map Number	86	86	86	86	86	86	86
Operating Authority	MUN	MUN	IND	IND	IND	IND	IND
Location	Amherstview	Amherstview	Millhaven	Millhaven	Millhaven	Millhaven	Millhaven
Supplier/Receiver	North Channel	North Channel	North Channel	North Channel	North Channel	Creek to North Channel	Creek to North Channel
Point of Discharge					Offshore	River Mouth	River Mouth
Terminal Basin	Lake Ontario	Lake Ontario	Lake Ontario	Lake Ontario	Lake Ontario	Lake Ontario	Lake Ontario
Activity	Municipal Water Treatment	Municipal Water Treatment	Manufacturing of Polyester fibres	Manufacturing of Polyester fibres	Manufacturing of Polyester fibres	Manufacturing of Polyester fibres	Manufacturing of Polyester fibres
Process Type	Chemical Treatment	Chemical Treatment	Produced by the reaction of ethyleneglycol and terephthalic acid	Produced by the reaction of ethyleneglycol and terephthalic acid	Produced by the reaction of ethyleneglycol and terephthalic acid	Produced by the reaction of ethyleneglycol and terephthalic acid	Produced by the reaction of ethyleneglycol and terephthalic acid
Supply/Discharge Type	Continuous	Continuous	Continuous	Continuous	Continuous	Continuous	Continuous
Treatment Type	Chlorination via contact tank	Chlorination via contact tank	Potable water - carbon filtered & chlorinated, some cooling water treated by Adam's Filter	Potable water - carbon filtered & chlorinated, some cooling water treated by Adam's Filter	Clairifiers and Aeration lagoons	None	None
Comments	Brooklands Pumping St. Flow not metered	Harewood Pumping St. Flow not metered			Outfall effluent is waste cooling, and treated sanitary	Effluent composed of air conditioning and other cooling water	Effluent composed of air conditioning and other cooling water
Design Flow (1000m3/day)	NA	NA	163.00	163.00	NA	NA	NA
Mean Annual Flow (1000m3/day)	NA	NA	86.33	86.33	11.28	16.64	55.78
Pipe length from shore (m)	NA	NA	553.00	533.00	201.00	0.00	0.00
Pipe Diameter (cm)	NA	NA	107.00	91.00	122.00	NA	NA
Water Depth at end of pipe (m)	NA	NA	36.60	36.60	6.00	0.00	0.00
Water depth above end of pipe (m)	NA	NA	34.00	34.00	6.00	0.00	0.00
Diffuser					NO	NO	NO
Number of ports							

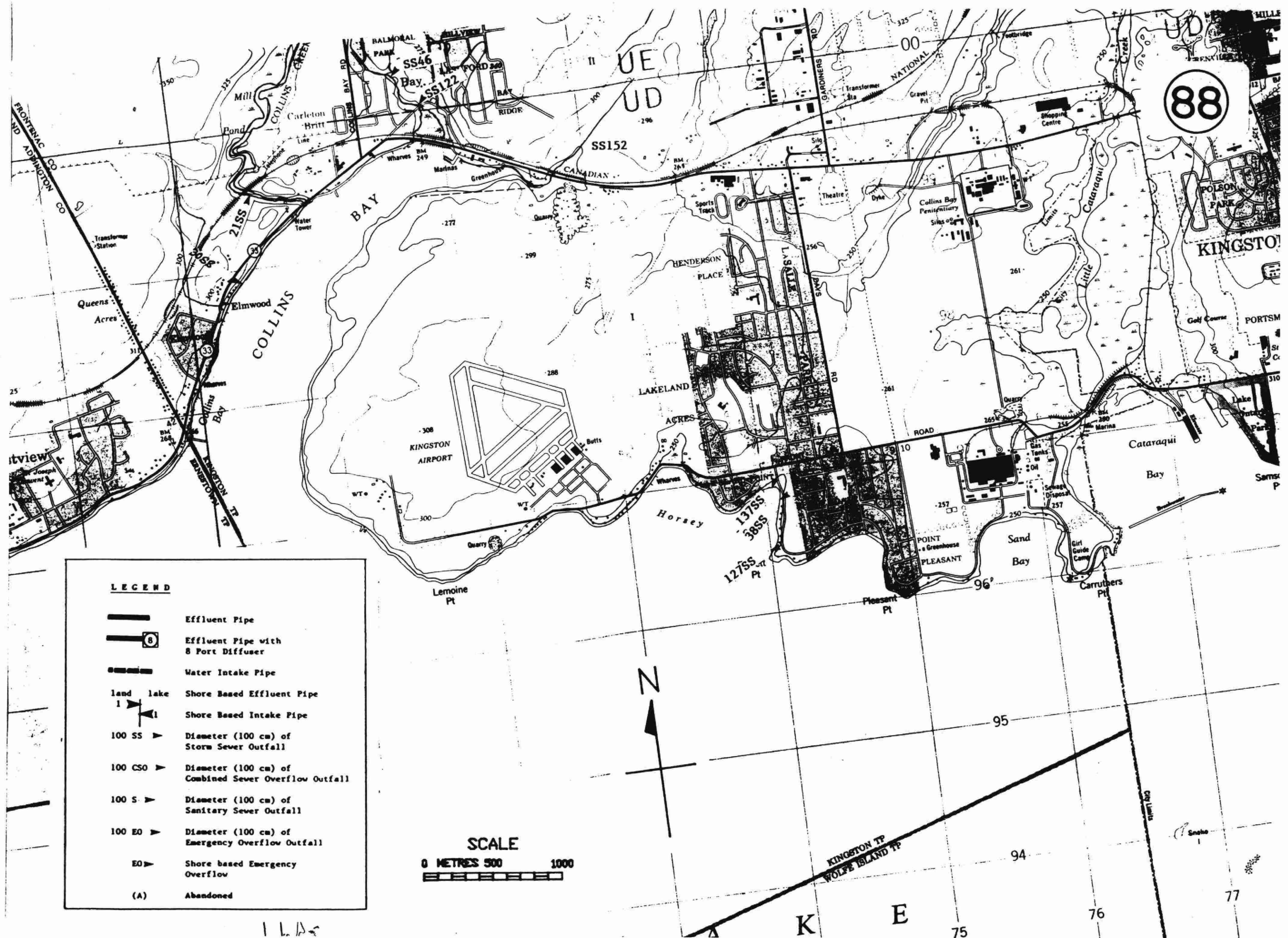


LEGEND

	Effluent Pipe
	Effluent Pipe with 8 Port Diffuser
	Water Intake Pipe
	Shore Based Effluent Pipe
	Shore Based Intake Pipe
100 SS	Diameter (100 cm) of Storm Sewer Outfall
100 CSO	Diameter (100 cm) of Combined Sewer Overflow Outfall
100 S	Diameter (100 cm) of Sanitary Sewer Outfall
100 EO	Diameter (100 cm) of Emergency Overflow Outfall
EO	Shore based Emergency Overflow
(A)	Abandoned

Name	Amherstview WSS					
Intake/Outfall	Intake					
UMIS/IMIS No.	220001879					
Structure No.	1					
Map Number	87					
Operating Authority	MUN					
Location	Amherstview					
Supplier/Receiver	North Channel					
Point of Discharge						
Terminal Basin	Lake Ontario					
Activity	Municipal Water Treatment					
Process Type	Chemical Treatment					
Supply/Discharge Type	Continuous					
Treatment Type	Chlorination via contact tank					
Comments	New water treatment plant expected to be built in next 5 years to replace entire Amherstview system					
Design Flow (1000m3/day)	NA					
Mean Annual Flow (1000m3/day)	2.61					
Pipe length from shore (m)	109.00					
Pipe Diameter (cm)	50.00					
Water Depth at end of pipe (m)	3.05					
Water depth above end of pipe (m)	4.88					
Diffuser						
Number of ports						





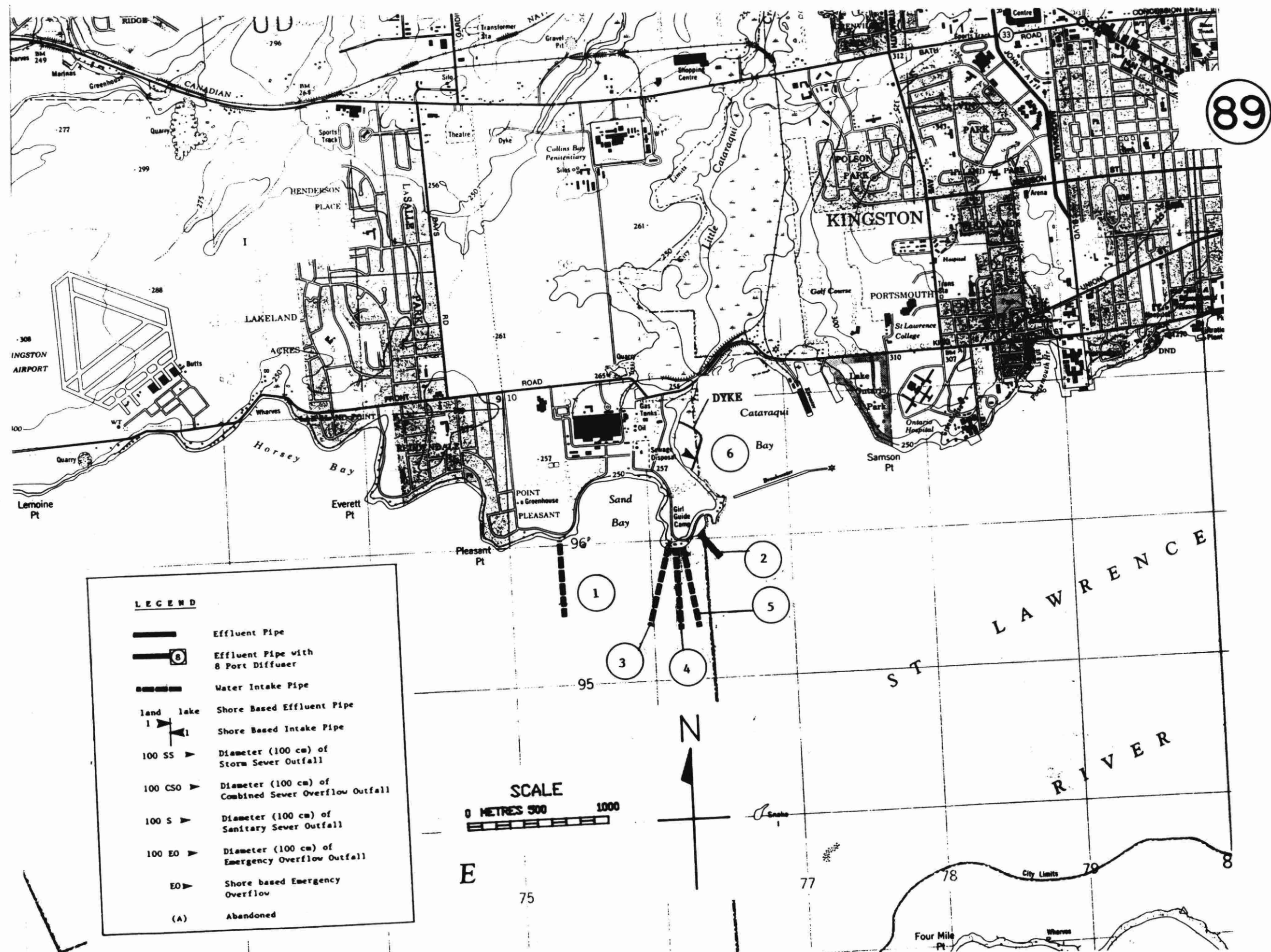
LEGEND

- Effluent Pipe
- Effluent Pipe with 8 Port Diffuser
- Water Intake Pipe
- Shore Based Effluent Pipe
- Shore Based Intake Pipe
- 100 SS > Diameter (100 cm) of Storm Sewer Outfall
- 100 CSO > Diameter (100 cm) of Combined Sewer Overflow Outfall
- 100 S > Diameter (100 cm) of Sanitary Sewer Outfall
- 100 EO > Diameter (100 cm) of Emergency Overflow Outfall
- EO > Shore based Emergency Overflow
- (A) Abandoned

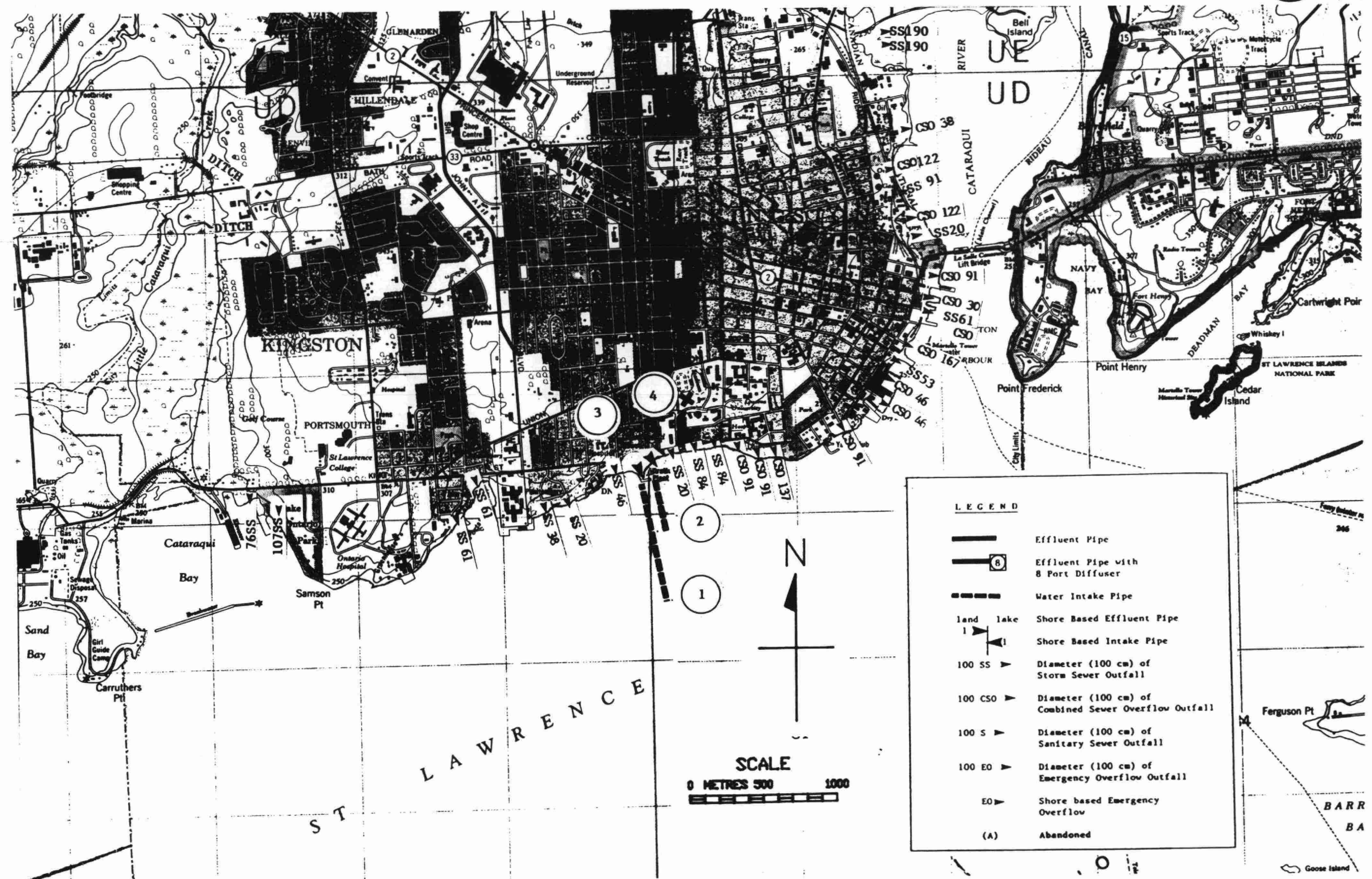
SCALE

0 METRES 500 1000

Name	Kingston TWP WTP	Kingston TWP WPCP	DuPont Canada Ltd.	DuPont Canada Ltd.	DuPont Canada Ltd.	DuPont Canada Ltd.
Intake/Outfall	Intake	Outfall	Intake	Intake	Intake	Outfall
UNIS/INIS No.	220001851	110000365	0000080101	0000080101	0000080101	0000080101
Structure No.	1	2	3	4	5	6
Map Number	89	89	89	89	89	89
Operating Authority	MOE	MOE	IND	IND	IND	IND
Location	Kingston TWP	Kingston TWP	Kingston TWP	Kingston TWP	Kingston TWP	Kingston TWP
Supplier/Receiver	Lake Ontario	Lake Ontario	L. Ontario/St.Lawrence R.	L. Ontario/St.Lawrence R.	L. Ontario/St.Lawrence R.	Cataraqui Bay
Point of Discharge		Offshore				Embayment
Terminal Basin	Lake Ontario	Lake Ontario	St. Lawrence River	St. Lawrence River	St. Lawrence River	St. Lawrence River
Activity	Municipal Water Treatment	Municipal Sewage Treatment	Artificial Fibers Manufacturing	Artificial Fibers Manufacturing	Artificial Fibers Manufacturing	Artificial Fibers Manufacturing
Process Type	Physical and Chemical Treatment	Secondary Treatment	Adipic acid and Hexamethylenediamine are reacted to form nylon	Adipic acid and Hexamethylenediamine are reacted to form nylon	Adipic acid and Hexamethylenediamine are reacted to form nylon	Adipic acid and Hexamethylenediamine are reacted to form nylon
Supply/Discharge Type	Continuous	Continuous	Continuous	Continuous	Continuous	Continuous
Treatment Type	Direct Filtration Chlorination	Activated Sludge P Removal-Continuous Effluent Chlorination	Screened and Chlorinated	Screened and Chlorinated	Screened and Chlorinated	Retention/Settling Lagoon
Comments			Water used for drinking sanitary, cooling and boiler feed. Mean Annual Flow for plant is 70.60.	Water used for drinking sanitary, cooling and boiler feed. Mean Annual Flow for plant is 70.60.	Water used for drinking sanitary, cooling and boiler feed. Mean Annual Flow for plant is 70.60.	Cooling water only
Design Flow (1000m3/day)	27.00	25.50	55.00	57.00	57.00	169.00
Mean Annual Flow (1000m3/day)	12.90	18.25	70.60	70.60	70.60	69.70
Pipe length from shore (m)	521.00	300.00	570.00	570.00	570.00	50.00
Pipe Diameter (cm)	122.00	100.00	51.00	91.00	91.00	165.00
Water Depth at end of pipe (m)	17.10	15.00	25.00	25.00	25.00	1.20
Water depth above end of pipe (m)	17.10	NA	23.50	23.50	23.50	0.20
Diffuser		NO				NO
Number of ports						



Name	Kingston WTP	Kingston WTP	Kingston WTP	Kingston WTP			
Intake/Outfall	Intake #1	Intake #2	Outfall #1	Outfall #2			
UMIS/IMIS No.	220001860	220001860	220001860	220001860			
Structure No.	1	2	3	4			
Map Number	90	90	90	90			
Operating Authority	MUN	MUN	MUN	MUN			
Location	Kingston City	Kingston City	Kingston City	Kingston City			
Supplier/Receiver	L.Ontario/St.Lawrence R.	L.Ontario/St.Lawrence R.	L.Ontario/St.Lawrence R.	L.Ontario/St.Lawrence R.			
Point of Discharge							
Terminal Basin	St. Lawrence River	St. Lawrence River	Shore	Shore			
			St. Lawrence River	St. Lawrence River			
Activity	Municipal Water Treatment	Municipal Water Treatment	Municipal Water Treatment	Municipal Water Treatment			
Process Type	Physical and Chemical Treatment	Physical and Chemical Treatment	Physical and Chemical Treatment	Physical and Chemical Treatment			
Supply/Discharge Type	Continuous	Continuous	Batch	Batch			
Treatment Type	Filtration, Coagulation Flocculation and Chlorination	Filtration, Coagulation Flocculation and Chlorination	Filtration, Coagulation Flocculation and Chlorination	Filtration, Coagulation Flocculation and Chlorination			
Comments			Filter Backwash effluent pipes. No treatment to backwash	Filter Backwash effluent pipes. No treatment to backwash			
Design Flow (1000m3/day)	250.00	90.90	136.40	136.40			
Mean Annual Flow (1000m3/day)	47.30	47.30	1.30	1.30			
Pipe length from shore (m)	824.00	366.00	3.00	0.00			
Pipe Diameter (cm)	120.00	75.00	75.00	75.00			
Water Depth at end of pipe (m)	17.00	15.00	2.50	2.50			
Water depth above end of pipe (m)	17.00	15.00	2.00	2.00			
Diffuser			NO	NO			
Number of ports							



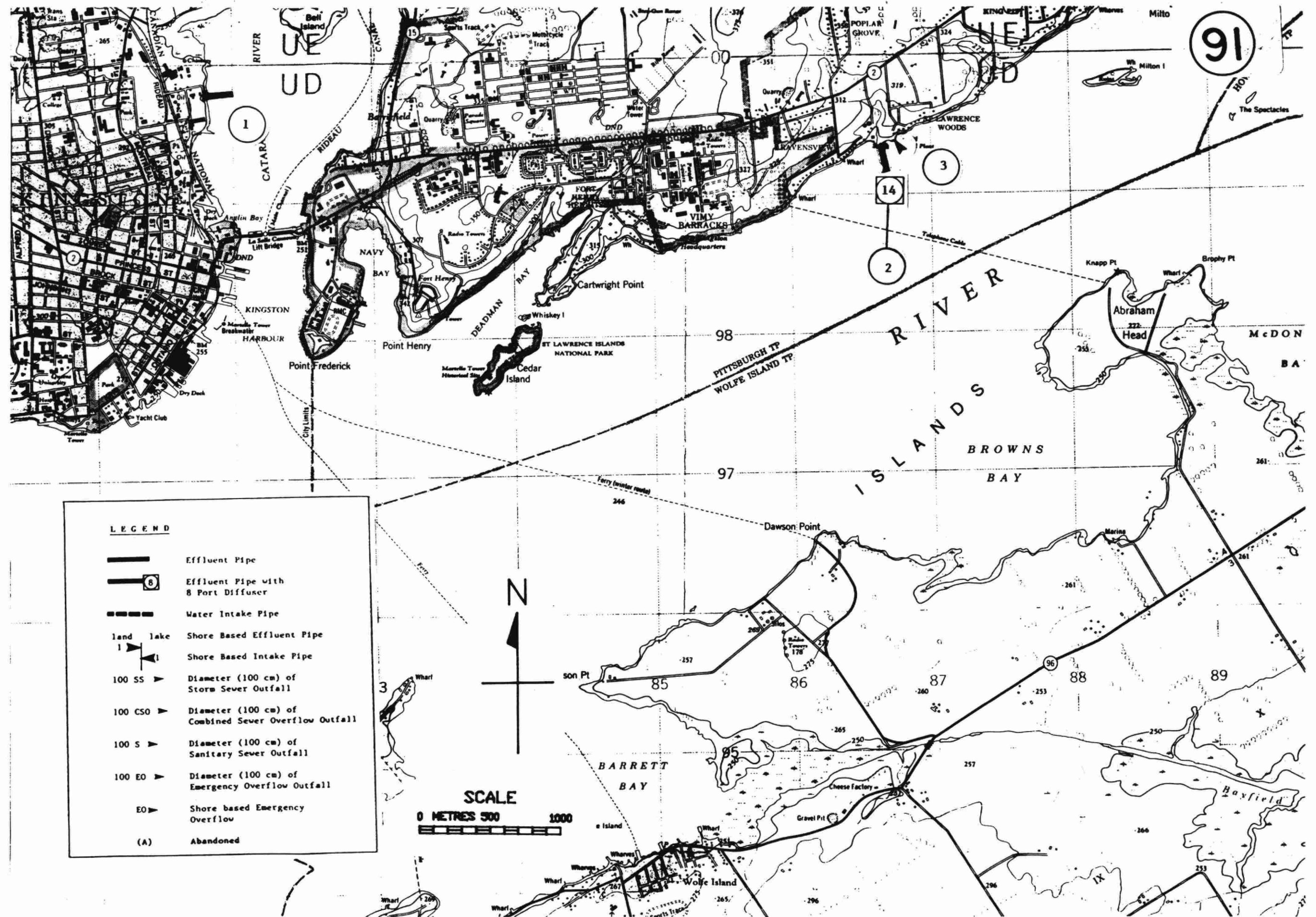
LEGEND

- Effluent Pipe
- Effluent Pipe with 8 Port Diffuser
- Water Intake Pipe
- Shore Based Effluent Pipe
- Shore Based Intake Pipe
- Diameter (100 cm) of Storm Sewer Outfall
- Diameter (100 cm) of Combined Sewer Overflow Outfall
- Diameter (100 cm) of Sanitary Sewer Outfall
- Diameter (100 cm) of Emergency Overflow Outfall
- Shore based Emergency Overflow
- Abandoned

SCALE

0 METRES 500 1000

Name	River St. Pumping Station	Kingston WPCP	Kingston WPCP				
Intake/Outfall	Outfall	Outfall	Intake				
UMIS/IMIS No.	NA	120001050	120001050				
Structure No.	1	2	3				
Map Number	91	91	91				
Operating Authority	MUN	MUN	MUN				
Location	Kingston City	Ravensview	Ravensview				
Supplier/Receiver	Big Cataraqui River	L.Ontario/St.Lawrence R.	L.Ontario/St.Lawrence R.				
Point of Discharge	River Mouth	Offshore					
Terminal Basin	St. Lawrence River	St. Lawrence River	St. Lawrence River				
Activity	Sewage Pumping Station	Municipal Sewage Treatment	Municipal Sewage Treatment				
Process Type	Storm Overflow	Primary Treatment	Primary Treatment				
Supply/Discharge Type	Periodic	Continuous	Batch				
Treatment Type	None	Primary Settling Lagoons P Removal-Continuous Chlorination	Primary Settling Lagoons P Removal-Continuous Chlorination				
Comments	Discharge of Municipal Sewage during periods of Heavy Rain		Raw water intake for Process water only Raw water screened only				
Design Flow (1000m3/day)	136.10	61.40	NA				
Mean Annual Flow (1000m3/day)	NA	59.10	0.10				
Pipe length from shore (m)	180.00	180.00	10.00				
Pipe Diameter (cm)	120.00	105.00	15.00				
Water Depth at end of pipe (m)	2.70	14.00	2.00				
Water depth above end of pipe (m)	1.50	12.00	1.50				
Diffuser	NO	YES					
Number of ports		14					





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